

790

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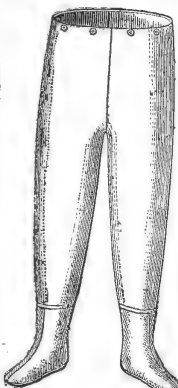
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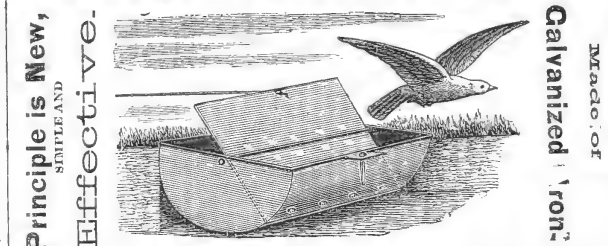
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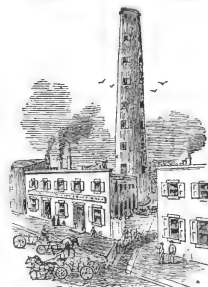
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ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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Six Mo's, \$2, Three Mo's, \$1.

NEW YORK, THURSDAY, AUGUST 5, 1880.

Volume 15—No. 1.
Nos. 39 and 40 Park Row, New York.

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FOREST AND STREAM.

NEW YORK, THURSDAY, AUGUST 5, 1880.

OUR MIDSUMMER NEW YEAR.—The register at the head of this page marks the first number of a new volume, and this journal to-day enters upon the eighth year of its publication.

We are duly gratified at attaining this maturity, and express our satisfaction in a substantial manner by a change for the better in make-up and the adoption of a superior grade of paper. These improvements, with the others which have been introduced within the last six months, now make the FOREST AND STREAM a model in its mechanical execution.

If we may credit the many kind words of our friends and the evidence afforded in the decided indorsement of a stanch patronage, the paper is also growing apace in the value of its contents.

That the FOREST AND STREAM has succeeded in adapt-
ing itself to the wants of the gentlemen sportsmen of
merica, and is in turn supported and indorsed by them,
highly satisfactory, and is complimentary to all con-
cerned, for it is proof positive of two things—first, of
the wisdom of the management of the paper, and second, of
good taste of the sportsmen.

ADVERTISEMENT.—Advertisers are respectfully re-
quested, in all cases where it is possible, to send in their
advertisements by Saturday of each week before the issue
which they wish them to appear. We cannot receive
advertisements, nor make changes in those already
under, later than Tuesday morning.

—The portrait of Greene Smith, which we had hoped
publish this week, has been unfortunately delayed.
We are, therefore, reluctantly compelled to defer it
till our next issue.

THE NEW GAME AND FISH PROTEC- TORS.

SEVERAL amendments to the game law of the State
of New York were proposed last winter, but only
one act among them received the signature of the Gov-
ernor and became a law. As a rule, changes in our game
laws are too frequent to be thoroughly learned by the
people at large before they are modified or entirely su-
perseded by others, and in many cases this frequent tin-
kering is a worse evil than no law at all, causing many
people to despair of comprehending or remembering the
ever-changing clauses of the laws, and almost rendering
it necessary for a sportsman to carry a copy of the Re-
vised Statutes with him into the field before he dare
wet a line or pull a trigger. The practice of having dif-
ferent laws or different close seasons for fish and game
in adjoining counties, is often the cause of much un-
witting violation of the law by those who are ignorant of
such difference; but the main trouble has been not so
much in the law itself as in its lack of enforcement, de-
pendent, as it has been, upon clubs, societies and in-
dividuals, who were either actuated by public spirit or a
desire for gain, former laws having a provision allowing
the informer or prosecutor to receive a portion of the
penalty imposed upon the transgressor—a clause which
rendered the complainant liable to the suspicion of mer-
cenary motives, and often invested the offender with the
sympathy of his neighbors as a persecuted man.

It is a fact well known to all who have watched the
workings of the game laws, that the local constables are
not to be depended upon to prosecute their friends or
townsmen for an offense which is to them a venial one,
and in the eyes of too many others one to which no
moral guilt is attached.

It is to be hoped that the officers appointed under the
new law will prove to the poachers and unprincipled
marksmen that the game law is not a dead letter. This
law, which was very carefully framed by Mr. John E.
Devlin, of New York City, provides for the appointment
of eight officers, to be known as Game and Fish Protec-
tors, who are to have full power to enforce the laws and
arrest all offenders, and in order to secure a good class of
men in these positions, no share in the penalties is of-
fered, but instead of this a salary is given. We under-
stand that the appointments are made, but the list has not
reached us yet, and with the right men, who will do their
duty fearlessly, there is a prospect that the laws which
have been defied so long will now be enforced.

These protectors will be charged with the duty of en-
forcing all statutes for the preservation of moose, deer,
birds and fish, or other game laws, and to bring, or cause
to be brought, actions and proceedings in the name of the
people of the State, against all offenders. They are to be
appointed by the Governor, and will hold office for three
years from the date of their appointment. Section 1
provides that the district attorney of any county in the
State shall, upon the request of any one of such protec-
tors, commence and prosecute to termination, action
against any person reported to him by such protector to
have violated any of these laws. Section 2 provides that
any net, pound, or other means or device for taking fish
which is set in violation of existing laws, is declared a
nuisance, which may be abated by any citizen, and the
protectors, if applied to, must seize and remove it. Sec-
tion 3 gives the protectors authority to arrest persons
violating any of the provisions of any statute now or
hereafter enacted for the protection of fish and game
without the formality of a warrant.

For these services the protectors are to receive a salary
of \$500 per year, and traveling expenses not to exceed
\$250.

We hope for a better enforcement of the existing laws
under this new regime, and shall watch it with great in-
terest, and think that at least one of these protectors
should be located in New York City, to watch the mar-
kets, which are the great inducement to the market
poacher to violate the law. Destroy his chance of profit
and his desire to shoot or net illegally is gone, and we
do not think that it would be an exaggeration to say

that one-fourth of all fish and game which is unlaw-
fully killed within the settled portions of the State finds
its way to the markets of the great city.

COL. BODINE'S IRISH VICTORY.

THE return of Col. Bodine and his explanations of
his work and the work of his team in Ireland
adds the emphasis of an official sanction to what the
FOREST AND STREAM has already given in the regular re-
ports of the match. With more details about the
weather conditions, the effort of the six men who added
another defeat to Irish rifle history only appears the more
brilliant. On such a day the score of the Irish team
shows that the men have fully mastered the problem of
wind judgment, while on behalf of the Americans it
must be said that they are entitled to a credit fully up to
that accorded any previous team.

The Irish riflemen, more than at any of the preceding
matches, had a clear anticipation of success; they had,
by their successive defeats, arrived at a very distinct un-
derstanding of the strength of the American team shoot-
ers. Every little incident and contributory element of
strength had been carefully gauged, and such sharp
watchers as the Rigbys, Milner and Fenton had taken in
the points which in their opinion helped to the line of
victories which the Creedmoor men have enjoyed. The
Americans have not been reticent at all in proclaiming
the secrets of their victories. Everything has been set
out in the plainest of terms, so that American riflemen,
while leading the world, have not made a mystery of
their craft. For a time the Irish riflemen did not heed
the lesson. They did not seem to comprehend the propo-
sition that the strength of a well organized team is far
ahead of the mere total of the strength of its individu-
als. The old muzzle-loaders, once the weapon beyond
comparison at long range, was clung to in spite of the
overwhelming proof of each match that the American
marksmen had united accuracy with convenience in their
breach-loaders. The proof of their error was too strong
for the most conservative of Irishmen or Englishmen to
withstand, and with a prospect of an unlimited series of
annual whippings before them if they persisted in their
antiquated methods, the Messrs. Rigby decided on a
change. First came the change in the position when
firing, in the adoption of the back-position, which is now
the universal position for long-range work. In the sev-
eral years of quiet which have elapsed since their last
match at Creedmoor, the Irish have been hard at work,
and when the invitation of this spring was sent out
they were prepared to reap the victory they anticipated
from Irish labor and American listlessness. But while
the shooters on this side the water had done little or
nothing in the way of showing their skill, they had lost
none of their cunning, and with a good reasoning of that
indefinable element—luck—another leading score was
put on record.

Col. Bodine may do a good service for riflemen or, this
side by giving, in his written and formal report, a careful
survey and estimate of the several points in which the
Irish riflemen have added to their strength, and wherein
our chances of continued success now lie. One thing
is certain, that from this time on none but the most
perfectly organized teams should be permitted to go
forth as representative ones. From what Col. Bodine
says, and from what he significantly omits to say, it is
pretty certain that he had much crude strength and much
discordant material in his team; but he had the back-
bone and the good sense to determine, when it came to
a choice between discipline and defeat, to choose the
former. The best the discomfited ones can say is that
he might possibly have had a stronger team. It is hardly
probable that he would. The good men of his squad did
all that was expected of them, the weak men more, and
and so the fight was won. *A priori*, we should say that
the omission of Capt. Jackson from the shooting six
was a mistake. There may have been some element of
partiality and personal feeling entering into the omis-
sion, as is claimed in some quarters; but it must be con-
ceded that the right of judgment was given to Col. Bo-

dine, and that this fact was known to all members of the team long before they began shooting for places on the team. The proper feeling among all the team men should have been a complete abnegation of self. They were sent to conduct a campaign on behalf of America generally, and this object having been gloriously accomplished, it will be very difficult indeed to make the people of America believe that there was any very grievous error committed by Col. Bodine in making up his team. Somebody's corns may have been stepped on, but the public cannot be expected to cry therefore. The late American team leader may not be an immaculate Solon, but he certainly has been a creditable commander, and those for whom he fought and won will not be very curious to go behind the returns. If any positive injustice has been done any one, the FOREST AND STREAM will do all in its power to expose such ill-doing; but our columns cannot be made the vehicle of indefinite abuse. Until somebody can show us that Col. Bodine did not win the match at Dollymount, we must be excused in our belief that it was the men who shot and not the men on the reserve who carried the day.

THE ANTHRACITE DECLINES.

THE challenge to the Anthracite by the Herreshoff Manufacturing Co., of Bristol, has been declined by the agents of the Perkins system on the grounds of "the different size and power of the yachts." We are not aware what claims Mr. Perkins' agents have to being considered engineers, nor that they make any such, but we do know that the excuse offered for not meeting the challenge is a very frivolous one. Everybody knows by this time that there is nothing in America slow enough to make a race in speed with the Anthracite. The working speed of the latter seems to be something like six miles, and eight miles is about the best she can do. Our steam barges do better than that; consequently, a race between the English steamer and anything in America was out of the question. But in the test of economy the difference in hull of Leila and Anthracite has no influence whatever, as the engineers aboard the latter could probably have informed the agents. It is a question of producing one horse power at the least consumption of fuel, apart altogether from what the resultant speed of the vessels may be. For that matter, they might both have been tied up to the dock during the trial without in the least violating the deductions. The only reasonable condition the Anthracite could have demanded would have been equality in the efficiency of propellers, so as to eliminate differences on that score.

The best recorded performance of the Perkins system is 1.6 pounds, whatever else the originators of the fairy tales now floating about may assert. We have before us the record of 1.9 pounds for a common collier, with ordinary cylindrical boiler and common engines and steam about 80. Given 150 pounds pressure instead, a well-designed engine, and the careful stoking and selected fuel used in test trials, and there can be no question but that the collier would have equalled the Anthracite in economy, to say nothing of steaming around her in circles, which is an irrelevant matter. The Babcock & Wilcox, as well as many other sectional boilers, produce steam inside of two pounds at comparatively moderate pressure, and we have good reason for stating that the Herreshoff coil is quite as economical as the Perkins boiler, besides being far better suited to stand the results of expansion and contraction, easier to repair, cheaper in first cost, lighter and under better control, the range of the gauge being less than a fifth of that even experienced hands aboard the Anthracite require.

It is to be regretted that the Anthracite has refused an excellent opportunity of proving what has been crammed into the space writers of our esteemed daily contemporaries. Her refusal is clearly a case of funk. The British government, in search of just such a boiler for torpedo and launch service, has given the Herreshoff coil the preference, and any one who knows how hard it is for a body of Englishmen to accept an American idea will be able to appreciate this at its full value.

The United States government will probably appoint a board to examine the claims of the Perkins system. We trust competent engineers will be put on the board, not rusty, old time skippers. Let the board be composed of men who know enough to detect the difference between clap-trap and facts, and we warrant the Perkins system will show up only a clumsy adaptation of ideas much better carried out by others.

ANOTHER PENNSYLVANIA ASSOCIATION.—The sportsmen of Butler, Pa., have organized the Bucks County Association for the Protection of Fish and Game, and the officers for the ensuing year being as follows: President, Alex. Russell; Vice-President, Clarence W. Coulter; Treasurer, E. D. Colbert; Secretary, E. W. Vogley. Directors—Chairman, John N. Muntz; Secretary, George W. Zeigler; John S. Campbell. This club, like others recently formed in Pennsylvania, has abundant opportunity for systematic and definite work.

BAY SNIPE SHOOTING.

1.—NOMENCLATURE.

—"all our proudest lore,
Is but the alphabet of ignorance."

MUCH has been written about the confusion which exists in the local names of our game birds and animals, and all to little purpose. Notwithstanding the gallons of ink that have been spilled, and the quantities of pens that have been spoiled in urging a general reform in local nomenclature, no steps have been taken looking toward the adoption of the simple and characteristic English names which ought to come into use throughout the whole shooting community. A ruffed grouse is still a "pheasant" in the South and West, and a "partridge" in the North and East; and while the "gopher" of the South is a tortoise, the "gopher" of the trans-Missouri region is a little rodent nearly allied to the squirrel.

It is evident that we cannot hope in our day to have the language of science come into general use among sportsmen, and, on some accounts, it is not desirable, at present, that this change should take place; for, in many departments of biology, the scientific nomenclature is only provisional and is constantly changing, and a name employed to-day is obsolete to-morrow. These changes, of course, are to be kept up with only by the specialist. It is not possible that the general reader should follow them.

What we now need are simple English appellations for our game animals—names which shall recommend themselves to everyone, and shall thus force themselves into general favor at once. The shore gunners have such names for many of our bay birds and ducks, and the humble bayman has in many cases been most happy in his namings, as there has always been some reason for homely appellations. He seizes some salient and characteristic point about an animal, and names it from that peculiarity. If we are to instruct and raise a higher standard of sport—and this, as sporting writers, is an aim that we shall not lose sight of—we must dot down our experiences in a way that can be readily understood by all, and preach our sermons with "simplicity" for our text. Therefore, we shall begin by giving a list of the birds worth shooting commonly called "Bay Snipe," and, as far as possible, the names of each species used in the districts where they are shot. By this, the sportsmen of our coast, from New Hampshire to North Carolina, will be able to distinguish the same bird under its guise of many local *aliases*, and the list will act as a key for the subject on which we are about to write. The following is such a list of birds shot over decoys or stools, including the waders and plovers commonly called

BAY SNIPE.

Long-billed curlew (*Numenius longirostris*), sickle-bill; sabre-bill. Sickle-bill is the name almost universally used. It is simple and descriptive.

Hudsonian curlew (*Numenius hudsonicus*), Jack; short-billed curlew. The Long Island baymen term this bird the Jack, while to both the eastward and southward he is more often called the short-billed curlew.

Esquimaux curlew (*Numenius borealis*), fute; doe bird; little curlew. In the Eastern States it is called the doe bird; on Long Island the fute, and in parts of the South the little curlew. The origin of the first two names we have failed to ascertain; the third speaks for itself.

Black-bellied plover (*Squatarola leucotis*), black-belt; bull-head; beetle-head; ox-eye; bottle-head; pilot. On Long Island this bird is generally known as the black-belt, on account of the black markings of its plumage. The young in August are, however, gray on the belly and are often mistaken for a distinct species. In New Jersey and Pennsylvania it is called both bull-head and beetle-head, and also, in the latter, ox-eye. On the coast of Virginia, about Cobb's Island, the name of pilot has been given, as it is always seen leading the large flocks of birds which the rising tides drive from the shoals and oyster banks, and it is supposed to direct the flocks "to pastures new." This, however, is not the case. It is the fastest flying bird of all the bay snipe, and it cannot fly slow enough for the other species.

Golden plover (*Charadrius fulvus virginicus*), golden back; green back; frost bird; whistling plover; bull-head. On Long Island and to the eastward it used to be known as the frost bird, so called on account of its appearance at the time of the early frosts in autumn, but of late years it has generally been called the golden back. On the New Jersey and Delaware coasts it is termed the green-back.

Great marbled godwit (*Limosa fedoa*), marlin; humility; brown-back; straight-billed curlew. Known along the seaboard, from Maine to Maryland, as the marlin, though occasionally called the humility or humilit, which name has also been given to the upland plover. On the coast of Maryland and Virginia it is known as the brown-back. In New Jersey it is sometimes called the straight-billed curlew.

Hudsonian godwit (*Limosa hudsonica*), ring-tailed marlin; white-tailed marlin; humility; Virginia woodcock. Generally known everywhere as the ring-tailed marlin, so called from the white band crossing the tail feathers. In parts of New Jersey known as the Virginia woodcock.

Semi-palmated snipe (*Totanus semipalmatus*), willet; marbled willet. Usually known as the willet, on account of its cry.

Tail-tale tattler, or snipe (*Totanus melanoleuca*), yelper; big yellow-legs; great yellow-shanks; tail-tale tattler; stone-snip; large cucu; willet. Familiar to all sportsmen as the big yellow legs; in parts of New Jersey called the willet; on Long Island and on the upper coast of New Jersey, the yelper, on account of its piercing notes.

Yellow-shanks tattler or snipe (*Totanus flavipes*), yellow legs; little yellow legs; lesser tail-tale. Known everywhere as the yellow-legs.

Red-breasted-snipe (*Macrorhamphus griseus*), dowitch; dowitcher; quail-snip; brown-back; grey snipe; driver. On Long Island and the northern coast of New Jersey called the dowitch;

South New Jersey, Delaware, Maryland Virginia and North Carolina, the brown-back.

Turnstone (*Streptopelia interpres*) calico-back; brant bird; chickling; olearic; sand runner; horse-foot snipe; beach bird. In Virginia, Maryland, Delaware, Southern New Jersey, the calico-back, on account of its reddish brown mottled colored back; Northern New Jersey, the horse-foot; Long Island and to the eastward, the brant bird; the young on the New Jersey coast are called beach birds.

Red-breasted sandpiper (*Tringa canutus*) robin snipe; knot; ash-colored sandpiper; grey-back; white robin snipe. Generally known everywhere on Long Island and New Jersey as the robin snipe, so called in the spring, as its brown plumage resembles the red-breasted thrush, or robin. In September in the South, it is called both grey back and white robin snipe.

Pectoral sandpiper (*Tringa maculata*); krierker; meadow snipe; fat bird; short-neck; Jack snipe; marsh plover; grass snipe; robin snipe; red-back. On account of its creaking, shrill cry, it is called the krierker on the Northern New Jersey coast, but further south it changes its name to short-neck and fat bird. On the inland meadows of New Jersey it is known as the robin snipe and meadow snipe. On Long Island it assumes several of the above names. It is said to never stool, but we have seen it do so occasionally.

Red-backed sandpiper (*Tringa alpina* var. *americana*); black-breast; black-breasted plover; winter snipe; red-back. Known on the coast from Maine to Florida, its most common name being the black-breast.

Long-legged sandpiper (*Megapodopsis himantopus*); stilt; bastard dowitch; bastard yellow leg; wood snipe; blind snipe; frost peep; drum-stick. On Long Island it is called the bastard dowitch, and on the Jersey coast, the blind snipe.

The above list comprises the different varieties of bay snipe that are worthy of the sportsman's aim. In addition to these there are the small plovers, called ring-necks, bench-snip and surf-snip, and the tiny sand pipers, such as the ox-eyes, sand-snip, shore birds and peeps, excellent when roasted, but only fit for little beginners to pop away at.

THE BUCKS COUNTY ASSOCIATION.—A game association has been organized in Bristol, Pa., under the name of the "Bucks County Game Protective Association." Its object is the rigid enforcement of the game law in the townships bordering on the Delaware River, comprising the section between Philadelphia and Trenton. John Burton, of Tullytown, is President; George A. Shoemaker, of Bristol, Secretary; Cornwall Woolston, of Emille, Treasurer; Arthur Dorrance, Charles E. Scott, W. D. Harned, Robert W. Rogers, G. W. Kirk, M. D., Amos B. Headly, Edward S. Stackhouse, and Joseph S. Hibbs, constitute a Board of Directors. The admission fee is fifty cents, each member pledging himself to pay such necessary assessments for police, etc., as may be levied from time to time by the directors. Although the club was organized so lately as June 29th, the membership fees alone are ample to run it for the present season. Game constables were placed on woodcock ground on July 1st, and did good service up to the 5th inst. The reed and rail marshes and quail and rabbit grounds will be duly watched until the opening day. Much good has heretofore been done in the vicinity of Bristol by individual effort, and this organized action cannot fail of success. Gunners and farmers freely tender their cooperation. The officers and directors of the new association are thorough business men, some of them very wealthy, and all energetic. We hope that they may capture and punish some of the pot-hunters and self-styled sportsmen from the adjacent cities.

CREDIT WHERE CREDIT IS DUE.—In our issue of May 6th we published a description of Grand Falls, N. B., concerning which that accomplished author, Mr. Chas. Lanman, writes to us as follows:—

One of your correspondents prints some information about the Grand Falls of New Brunswick. I presume he means those of the river St. John, as he does not seem to know anything about the Falls of the Nepisiquit. If that is so, let me inform him that he has not exactly made a discovery. The Falls of the St. John were described in one of my books as far back as 1848; and in 1857 I published three woodcuts of them in the London *Illustrated News*, which *Harpers's Weekly* copied, locating the scene in Maine and passing it off as original.

I notice also that another of your correspondents thanks Mr. R. T. Grease for a copy of Washington's letter on bloodhounds. The original letter came into my possession many years ago, and I printed a copy in the London *Athenaeum*, and also in the New York *Evening Post*, so that I can testify to the accuracy of the copy printed by you.

It was once, and it may be now, the rule of the London *Times* to consider all news unpublished which had not appeared in its own columns, and sometimes acting on this principle with great arrogance, but with imperturbable gravity, it would publish matter that had appeared in all the other papers a fortnight before. In its own special field, the FOREST AND STREAM acts on the same rule, holding that no angling resort, no hunting ground, no curiosity of sporting literature has been published until contained in its own columns, and this rule it acts upon, even in describing resorts which have already had a place in such widely circulated books as those of our accomplished correspondent. This new delving in the "old fields" detracts nothing from the credit of those who have worked there before us. Indeed, we have on our desk now something that has three times been published to the world; first, three hundred years ago in Latin, then in English black letter, and again on a steam press in modern type, and this we propose to put into print for a fourth time.

We should add that the correspondent who sent us the Washington letter copied it from what he believed to be the original manuscript, bought in Washington by Mr. John Dale, and now in that gentleman's possession.

Mr. Lamson's very readable sketch, published in this issue, forms one of the chapters of a forthcoming book by that author.

AMERICAN ARMS ABROAD.—The recent continued depression in the Birmingham gun trade has caused great anxiety among English manufacturers, and they have memorialized the government for assistance. The result of their petition has been that the government has decided to issue large orders for guns and rifles within a short time, and thus to give substantial aid to the gun-making industry.

The Boston *Daily Advertiser* makes use of this state of things as a text for a very sensible discourse on the importance of the arm-making industry in this country, from which we extract the following:—

The principal reason for this depression in the English gun trade is that American manufacturers have been able to obtain the foreign customers that were formerly supplied by the English. The Turkish government, although desirous of retaining the friendship of England, saw that the superior arms and ammunition made in this country were essential in order to make the most effective resistance, and therefore gave to New England the trade that formerly would have been given to old England. The Providence Tool Company contracts for 65,000 Pedermartin rifles were given—a contract which brought to the company between nine and ten millions of dollars. The Winchester Arms Company, of New Haven, obtained large contracts for arms and cartridges, and millions of cartridges were also purchased from the Union Metallic Cartridge Company of Bridgeport. The total amount expended in this country by the Turkish government for munitions of war for use in its recent struggle with Russia is estimated at over \$20,000,000.

In case of great emergency the private workshops of this country could daily fabricate thousands of rifles and millions of cartridges; these articles could be supplied much faster than troops could be found to use them.

The valuation of the national armory and arsenals and the government property at those places amounted, in 1877, to \$60,000,000. At the Rock Island arsenal there has been spent, up to December, 1876, \$5,999,735.42, and a further expenditure of \$2,530,000, it is estimated, will be required to complete this arsenal, exclusive of the necessary machinery and shop fixtures. Would it not be better to sell these government manufacturing establishments and apply the proceeds to the purchase of the needed armament for sea-coast defense?

A SUGGESTION FOR KENNEL CLUBS.—In the British Islands are thousands of dog fanciers who breed dogs with the hope of producing animals of such superior merit as eventually, in one way or another, to bring in not only a return for the expense of their rearing, but a handsome profit beside. An English contemporary notes that only a very few of these breeders ever succeed. To establish a strain which shall show a distinct family type of excellence requires a large kennel and long continued care and expense. One-dog breeders cannot succeed in originating strains. It is suggested that instead of so much misplaced and fruitless, because inadequate, effort in this direction, some of the larger kennel clubs provide themselves with the requisite number of animals, and then, under the supervision of a select and competent committee, carry out the experiments which shall develop by long and judicious management the strains possessing the approved qualities. In this way, also, many of the mooted points as to inter-breeding, etc., may be satisfactorily set at rest.

SALMON IN CALEDONIA CREEK.—On account of the Governor's veto to the annual appropriation bill for the New York Fish Commission, there was not money enough to do all the work, and to cut down expenses the ponds of quinnat, Atlantic and land-locked salmon, which had been raised at the State hatchery at Mumford, were turned loose in Caledonia Creek, where the fishermen are catching them. These fish were from one to three pounds in weight, and very valuable for breeders, and it is much to be regretted that such a course was rendered necessary.

Surely the good work done by the New York Fish Commission is worthy of being continued, and it is to be hoped that the Governor will reconsider his veto at the earliest opportunity.

—The *Utica Game and Fish Protective Association* having formed itself into a strong body of energetic workers, is now endeavoring to secure the organization of local clubs in the adjacent towns of Camden, Rome, Paris, Sangerfield, Boonville and Trenton; and also to secure in other smaller towns a representation by membership.

We are pleased to learn that the new association is increasing in numbers and in strength.

—The officers of the Blooming Grove Park Association for the year ending July 5th, 1881, are: President and Director, John McGinnis, Jr.; Vice-President, W. F. Wharton. Directors, F. Fearling, C. A. Grimes, L. Snyder, C. H. Read, T. C. Clarke, R. L. Ward, M. B. Brown, D. B. Mouzilly; Secretary, T. W. B. Hughes. The trustees for the new issue of bonds are: P. M. Wilson, Hamilton Busby, John Avery.

The Sportsman Tourist.

THE THOUSAND ISLANDS AND DOWN THE ST. LAWRENCE.

BY CHARLES LANMAN.

TO an old traveler, the idea of revisiting Lake Ontario, the Thousand Islands and the valley of the St. Lawrence is replete with pleasant anticipations; and aside from their own peculiar attractions, Niagara and Montreal cannot but be affectionately remembered, because of the world of beauty which lies between them. Of the five great inland seas (which should belong exclusively to the United States), Ontario, although the smallest, is not one whit behind its fellows in its achievements and possessions. Superior may well be proud of its matchless proportions, of its copper mines, pictured rocks, Royal Island, Thunder Cape, beautiful tributaries and the Sault Ste Marie; Michigan may boast of its Green Bay and great city of Chicago, and claim that no other waters on the globe are hemmed in by a more magnificent donjon; Huron, with its Georgian and Saginaw bays, the Island of Mackinac, the daughter lake of the St. Clair, and the river and city of Detroit, well deserves to occupy its central and commanding position; and Erie can well afford to let expressive silence muse its praise while pointing to the Falls of the Niagara; but of Ontario it may be said that within its bosom alone are mingled the waters of all the great lakes, and that out of the depths comes forth the most truly magnificent donjon in the continent, not even excepting the Columbia and Mississippi.

The length of Lake Ontario, originally called Lake St. Louis is 172 miles, width 59 miles, its level below Lake Erie 331 feet; elevation above the Atlantic 202 feet, and its greatest depth more than 50 fathoms. In the summer time a sail upon its waters, in either the American or British steamers, is delightful, the winds being generally cool and invigorating, and the sickening ground swell of the ocean simply a thing of the past. The very clouds which hang over its sparkling waters seem to have a purity of their own, and its sunset and sunrise revealings are enhanced in their beauty by the mystical lore of the aborigines who once peopled its shores. It is also noted for its beautiful illusions of the mirage, and for its occasional water spouts; and especially for the peculiarity of the tides—for it has been asserted that at intervals of about seven years its waters rise to an unusual height and then subside in their ordinary level—a phenomenon which has never been explained. It may also be stated in regard to this lake that, like its four great confederates, it is never entirely frozen over during the winter months, and there have been times when ice-boats have gone from Toronto to the mouth of the Niagara, a distance of forty miles, in the incredible short space of less than an hour. One scene, experienced many years ago, with which it is associated in my mind, can never be forgotten. It was bright, and we were near enough to the northern shore to know that land was visible in that quarter, and the picture consisted of a sky lighted up by a burning forest, combined with a new moon shining in the marvelous beauty, while directly in front, and half way up the zenith, a purple aurora was coquetting with a retinue of clouds.

By those who travel for information, and not merely to kill time, the two land routes from the western to the eastern extremity of Ontario will be found full of interest. The first attractive spot on the southern side is Lake Niagara, which was founded by La Salle in 1668, partly destroyed by the Seneca Indians in 1675, subsequently taken and rebuilt by the French, captured by the English in 1759, acquired by the United States in 1796, recaptured by the English in 1813, and restored to our flag in 1815; and if its dungeons could recall what they once knew, we might learn many a sad and romantic story connected with deeds of heroism and suffering in the olden time. And then come, in their turn, as we travel eastward, the goodly towns of Oswego, Sackett's Harbor and Cape Vincent, all noted for their special attractions. The railway which passes along the northern shore of Ontario makes us acquainted with the cities of Hamilton, Toronto and Kingston.

The first has an exceedingly fine location, and is a business rival of its older neighbor, Toronto.

The second, a city of 17,000 inhabitants, was formerly called York, and as the commercial and intellectual metropolis of Upper Canada commands universal respect. After the fatigues of travel I know not a better place than this goodly city in which can be spent a more peaceful and restful Sabbath. Indeed, I was glad to learn that its inhabitants appreciated their blessing in this respect. And in having such a preacher among them as the Rev. William S. Ramsford, the curate of St. James' Cathedral, there is no wonder. These things, in this connection, one of the sentiments I heard him utter in the pulpit was to this effect: That he believed there were more Christian people in Western Canada than in any part of the world he had visited, "but," he continued, "can it be said with truth that they are all that they should be in politics and trade?" There are several handsome public buildings in Toronto. The drives in its immediate vicinity are not, especially interesting, but by going twenty, thirty or forty miles the sportsman will find beautiful lakes, where the fishing and wild fowl shooting are most enjoyable, especially at Lake Couchiching. With regard to Kingston, formerly called Catarqui by the Indians and by the French Frontenac, it is not only a place of some commercial importance, but ranks next to Quebec in the strength of its fortifications. And it is from this place chiefly that the tourist begins the passage, by steamboat, through the Lake of the Thousand Islands and down the rapids of the St. Lawrence to Montreal. As to the scenery along the north shore of Ontario it is tame and uninteresting.

That portion of the great river which now comes under our notice has a width of twelve miles, and extends from Kingston a distance of about fifty miles. The total number of islands here collected is said to be 1,300, ranging in their area from a few feet to many acres, the largest of them being of the shape of a great oval, and covered with woods, while others are skirted with rocky ledges and bluffs, and ornamented with fantastic vines; and

where they have not been despoiled and desecrated by the hand of man are universally beautiful. As the steamer pursues her intricate course between them the traveler wonders how she can ever escape the impending dangers, and when he passes into what seems a beautiful lake, he experiences a sense of relief. To describe these islands minutely must always be as difficult or impossible as to depict those of Lake George or the Thimble Islands of Long Island Sound, but while their charms are linked with the sea or a mountain land, those of the St. Lawrence seem to be the very children of the sky. In the level and far-reaching horizon which completely surrounds them, there is something marvellously impressive, and I have fancied that after nature had finished her work in this particular region, she deemed it well to draw aside and put out of sight all the high mountains, and remove far hence the roar of the waves on the shore of the ocean. Here, during the summer nights, no sounds fall upon the ear save the soft music of the flowing waters, and the weird voices of the owl and the loon. With the approach of dawn, birds without number, the kingfisher and bluebird, the blackbird and robin and flicker, the coot and the duck, come forth from their hiding places to resume the duties of their happy lives, and at the sunset hour the islands, as you look upon them, appear like gems encircled in halos of crimson light, and the islands themselves are like the sun, setting away; the simple hearted Indians, with their canoes and canoes, have been superseded by the selfish and savage white men with their villas and yachts and other modern abominations.

It was among the multitudinous islands of this river that the poet Thomas Moore conceived the idea of his charming Canadian Boat Song, although the actual scene of the poem was at the mouth of the Ottawa, and with it I connected the following particulars. As he was passing down the river in a canoe with a fellow-traveler, his boatman entertained him with a song, a portion of which he jotted down upon the fly-leaf of a book he was then reading. Many years afterward, while visiting a friend in Dublin, he was informed that a young lady was then in the city who possessed the original of his Boat Song, and he was greatly surprised. He remembered that the book in question had long before passed out of his hands, but he was never able to find his traveling companion but spirit in it, and he was subsequently given it to a friend in Dublin. The poet asked to see the volume, and it was shown him by the fortunate owner, who had received it as a gift from her father, who had received it from his friend, the poet's traveling companion. When his eyes fell on the well-remembered lines, as the story goes, he gazed upon them so long and earnestly that the lady said: "O, Mr. Moore, I hope you do not wish to take them from me; they are so precious!" "No, indeed," he replied, "I do not, but if you knew what thrilling remembrances of a happy past the contemplation of this page provokes, you would not wonder at my feeling. Since I wrote these lines I have been going so fast down the rapids of life that I owe you much for enabling me to live, though but for a few minutes, in the past, and I shall long remember this pleasant meeting." The poet then authenticated the lines, explained how and where they were written, that they were adapted to an air which the Canadian boatmen sang, and that the music was as much his own as were the words and the plaintive imagery.

But there is another name connected with these islands which no American can mention without a thrill of pleasure and of pride—that of George W. Bethune. He was a genuine angel, after the type of dear old Isaac Walton, and was wont to visit the Thousand Islands for his and his wife's fishing. On one occasion he asked his boatman where he was in the habit of going to church, and the man told him "Nowhere," as there was no church in that region. On the very next Sunday he took steps to inaugurate a Sunday-school, and by his sagacity he induced a non-professing but very worthy lady to take charge of the school; but, during that vacation, he died much by his own preaching and teaching to help the cause in which he had enlisted. His next step was to secure a missionary for that new field, who was supported there for three years at the expense of the doctor and his friends. Through his influence there were no less than ten other schools established among the islands, and after they had been supplied with books an enthusiastic old gentleman wrote to a friend that if Dr. Bethune could hear the children singing out of their new books he would think that angels had come from heaven. The final result was that a beautiful little church was erected at Alexander Bay, which the founder was wont to call his "Pet child of the Thousand Islands," and in which, after his death, was erected a beautiful tablet to his memory. And what a blessed memory!

These islands have also been the scene of thrilling romance. From their great number and the many channels among them, they afforded an admirable retreat for the insurgents in the last Canadian insurrection, as well as for the American sympathizers with them, who, under the questionable name of patriots, sought only to embarrass the British Government. In 1838, a band of men, headed by one Johnson, took refuge among these islands, setting all authorities at defiance; and provided with boats of surprising lightness they committed the most audacious outrages both up and down the river, and baffled all pursuit. The story is told of one of them that, when he was obliged, from close pursuit, to separate from his band, his daughter, with a devotedness and courage that was noble, applied gun and herself with the necessities of life to the solitary island, and took him in her canoe from one island to another under cover of the night.

To enjoy Lake Ontario and the Thousand Islands in their perfection, the tourist should have one or two companions, be well supplied with books and fishing-tackle, and remain among them for a month or more. Of course, when pressed for time, the steamboat trip must suffice; but in that case the pleasure is nearly counterbalanced by the annoyances. In the first place, the boats are generally crowded, and the variety of people a little bit too promiscuous, and the Yankee-Canadian fashion of "including meals" in the passage ticket, makes any kind of comfort impossible. Even your stateroom is made common property, and you may have a cut-throat for your sleeping companion; and unless you are willing to play the part of a Cincinnati quadruped you cannot get anything to eat, and, in any event, nothing that you can enjoy.

After leaving the Thousand Islands, on the route down the St. Lawrence, the leading attractions are the Rapids. Within the space of about a hundred miles the Laurentian and Canadian rivers, which are on opposite sides of the river, the fall of water is about one hundred and forty feet; but this descent occurs chiefly within two reaches, which measure ten and twelve miles. The names of the six principal rapids are the Long Sault, the Coteau du Sac, the Cedars, the Split Rock, the Cascades and the Lachine Rapids. The navigation is, of course, intricate, and the currents very powerful and fearful to the inexperienced, but the river is so well managed by experienced Canadian pilots that accidents have seldom happened. The passage of all these rapids is something quite fearful to the majority of people, but to those who have run the rapids of the North, with Indians to their birch canoes, the dangers are not so appalling. But should the steamer happen to run the rapids, at the same time that two or three great timber rafts, ornamented with sails and oars upon them, come booming down on either side of her own course, the excitement is greatly enhanced; and if accompanied by a thunderstorm, there is then something truly fearful in the passage. Of the villages on this route there are only three which possess any unusual characteristics, namely, the Indian villages of St. Regis and Caubawanga and the hamlet of Lachine, which the French have so strangely named up the Chiené River. Everywhere and in all these places the inquisitive tourist can find many people and things of interest. With St. Regis is associated the following interesting bit of history: The tourist will observe from the deck of the steamer the old church, lifting its tin roof above the neighboring houses. The bell hanging in this church rings out this story of genuine Indian revenge. On a way from France, in the 16th century, it was captured by an English cruise and taken into Salem, Mass., where it was sold to the church at Deerfield, in the same State. The Indians, hearing of the destination of their bell, set out for Deerfield, attacked the town, killed forty-seven of the inhabitants, and took one hundred and twelve captives, among whom was the pastor and his family. The bell was then taken down and carried to St. Regis, where it now hangs. The Indians were the inventors of the ball game and the Indians who were the inventors of the ball game to La Crosse. The shore scenery of the whole Upper St. Lawrence is very beautiful, especially along Lake St. Francis and Lake St. Louis, and the effects are charmingly humanized by the white spires of the Roman Catholic churches. And as the traveler approaches Montreal and looks upon the Victoria Bridge, and then calls the two lovely suspension bridges which span the Niagara, he will conclude that the skill of man is in these parts on a par with the splendor and the beauty of the scenery. It is indeed true, as some one has said, this St. Lawrence never knew a fresher; its waters are always pure, no matter how many streams may try to pollute it; that, taking in its whole course, it is magnificent, noble and enchanting; and although the property of two great nations, has always been neglected, and it is to-day becoming a respectable history.

While concluding this chapter, I must make a passing allusion to the cities of Montreal and Quebec, which are the natural resting places after descending the Upper St. Lawrence. They have always had for me a strange fascination. My first impressions of them were recorded more than thirty years ago, and since that time I have always entered them with pleasure and taken my departure with regret; but alas! the "order and bloom of years" are well nigh all departed. Montreal is still a most imposing and beautiful city, but the French population, with their simple ways, picturesque costumes and old houses, funny vehicles and pleasant social meetings, are now in a sad minority. The educational institutions of the city have multiplied and it now boasts of at least one hundred and fifty colleges, which do much to make the local atmosphere genial and sunny. There seems to be no abatement in the commercial enterprise of the people, but that the city of Toronto has proved to be a thorn in its side, cannot be doubted. The great Roman Catholic Cathedral is outwardly unchanged, but the interior has been completely renovated, and the criticisms which I made upon it many years ago, are still in his Philadelphia journal, and others, ought to be cancelled. In every way it is now a real credit to the city, but, nevertheless, it is not to be compared with its more modern rival in the city of New York, now the finest church edifice in the United States.

Of course I could not leave Montreal without calling to pay my respects to the most noted and most venerable angler on the continent—Harrison Stephens. I found him in his elegant mansion, but living with his noble wife in the same unpretending manner that has always been his choice. His enthusiasm for angling seemed to be as great as ever, and he recalled, with enthusiastic comments, our joint experiences in throwing the fly for bass under the Victoria Bridge, and for salmon in other parts of Canada. He also told me that having heard of a certain lake in the valley of the St. Maurice, which was famous for its trout, he had purchased not less than 14,000 acres of land, and he had surrounded it and that I must not fail to join him in a trouting expedition to that lake next summer. Mr. Stephens is now in the seventy-eighth year of his age, and although a native of Vermont, he has been identified with Canada for fifty years, and is reputed to be the wealthiest man in the Dominion.

I was glad to learn that among the reading people of Montreal, the late Charles Heavey was still held in affectionate remembrance. Although "nothing but a poet," he was, at the time of his death, in 1874, the most gifted literary man in Canada. At the same time, I suppose that there are thousands who never heard his name, but they are the people who would wonder at the mention of the names of Milton and Bunyan and Goldsmith. As I have elsewhere recorded my opinion of this brilliant poet of the North, I will resist the temptation to say more at the present time.

When about to continue our journey to Quebec, I was agreeably surprised to learn that the north shore of that part of the St. Lawrence could be seen and enjoyed from a railway train, and I was glad to avoid going down the river in a steamer at night, or taking the winding route by railway through Richmond. This part of the Dominion is thickly settled, and although the scenery is not especially attractive, there was something

particularly charming to me in the population, the farms and in the numerous villages. The people are exclusively French *habitant*, and the few churches with their steeples and wooden houses, one story and a half high, with dormer windows and comfortable porches, and the long lines of rail fences, all reminded me of the Detroit and Raisin rivers—so pleasantly associated with my childhood. Indeed, the rural scenery of the St. Lawrence from Montreal, on both sides of the river as far as Murray Bay on the north and Metis on the south, is full of interest. The principal roads of each parish run parallel with the river, and are completely lined with these rural dwellings. As a class the inhabitants are devoted to agriculture; entirely destitute of enterprise, they tread in the steps of their fathers. There is, perhaps, no more cheerful, happy or contented being in existence than the *habitant*: his little farm supplies him with enough to live upon, and he never gives himself anxiety about tomorrow. The men, like the old French peasant, wear the picturesque *capot*, and on their feet moccasins made of cowhide; the women jackets of bright colors, and on their heads either a cap or straw hat, made in the gipsy fashion. They are fond of social intercourse, and spend a goodly portion of their time in visiting each other. Those who live in the vicinity of Quebec, and it is not partly supply those markets with vegetables, and it is not an unusual thing for the tourist in the remotest nooks to come suddenly upon one of this race, trudging along staff in hand, and a bundle of baskets on his back, which he will shortly fill with berries, to be taken perhaps many a mile to market, and happy in his simplicity, humming to himself the burden of some old Norman song brought here by his forefathers centuries ago. In the *habitant*'s house the walls are always well whitewashed, the place is scrupulously clean, with flowers in the window. You may speak execrable French and make mistakes, yet you never see a smile on his face, nor on the faces of his children. For generations their character has undergone no change, their cheerfulness and primitive simplicity have been equally enduring. Truly it is pleasant to study the sunshine of the human heart, which beams out on these rugged spots of Nature's landscape. Among the cities from the north, between the rapids of that river and Quebec, the three most interesting are the Ottawa, the St. Maurice and the Jacques Cartier, and an account of them will be found in the two subsequent chapters of this paper. It only remains for me, in this place, to submit a few impressions of the "Citadel City" as it appears at the present time. And these impressions are by no means uninteresting. Of course its magnificent location and its many beautiful surroundings can never be changed, but the city is not now what it was in days of yore.

Politically speaking, it is compelled to be subordinate to Ottawa, the new seat of government, which is without a history, and indebted for its prosperity to a Canadian enterprise. This fact alone is a bitter pill to the people of Quebec; and the changes which have taken place in the city itself are universally regretted by those who have recently revisited it during their summer tours. The old French market, with its delightful characteristics, is a thing only of the past; the picturesque gateways in all directions, and hundreds of the historical and fantastic houses, have been destroyed; and the old *habitant* driver, have been superseded by an uncleanly Yankee invention, and the most exasperating breed of English and Irish hackmen to be found on the face of the earth.

The same ancient French is spoken to-day as in the old time; social intimacy between the French and English people is quite as invisible as it was a century ago, and the general desolation of the Roman Catholic institutions about the same as ever. To please one of my companions, I stepped into the Convent of Gray Nuns for a few moments, only to see the wretched beings cooped up in desolate rooms within their prison bars, and to find the Father Confessor, in his far more comfortable room, decanting on the skull of Montcalm, as if to exhibit the relic was a privilege of incalculable importance.

Among the many sensible suggestions made by the late Governor General (Lord Dufferin) was one that the walls and gateways of Quebec should be restored to their former condition, and the work was commenced, but has now been suspended for want of sufficient means. But this suggestion about the walls of Quebec was eclipsed by that other proposition, from the same gifted man, that the entire country round the former city of New France be transformed into an immense international park, and neutral ground for the people of all climes.

But I rejoice to know that there has been no retrograde movement in Quebec, so far as its intellectual character is exemplified by J. M. Le Moine. He is undoubtedly the most interesting literary man in Canada, and his "Maple Leaves," "History of Quebec," "Chronicles of the St. Lawrence," and very numerous descriptions of the scenery and people of his native Province are distinguished for their vigor and usefulness. And it may be said of this well-known author that, on the score of family pride, there is not another native of Canada who has a better right to be satisfied. During the last two hundred years not less than seven of his ancestors have found a place in history by doing much to advance French explorations, conquests and settlements in Canada and the United States.

During a stroll that we took through the grounds of the Citadel we met "Lorie and Louise." (Want of time and space prevents me from here giving all the preposterous titles which the poor Canadians are perpetually repeating.) The gentleman appeared to have a fine and manly countenance, but the lady was so busy with her two dogs that we could not distinguish her features, although the portrait in Robert Buchanan's book represents her as quite handsome. It is presumed that these noted personages have many noble qualities of mind and heart, but there is something sickening about the idea of a Yankee to be constantly showered upon them by the English Canadians. The wretched minion of a soldier who took us about the Citadel pointed out the plain building where the Queen's daughter does her eating and sleeping after the manner of ordinary human beings; and he told us that she was a "great artist," and was always painting; that she was fond of a "raining walk, like common people, and that on a recent occasion,

when the rain beat through a window and wet the floor of her chamber, she refused to let her servant wipe up the water, but went down upon her own knees and performed the necessary task. When the Queen's daughter can condescend to such service, should we not tremble for the continued supremacy of England?

At this present writing, it is just thirty-two years since "mine host" of the good old St. Louis Hotel extended to me his right hand of hospitality, although then located in a different locality; and because of all he has hitherto done in helping me to reach my fishing rivers in comfort I cannot but cherish his name with affection. As I sat chatting with him about the old times, he told me that his son was now the chief manager of the hotel, and also that this very agreeable gentleman was not born at the time I made my first visit to the river Saguenay, when my three-masted *habitant* smack, engaged for the expedition, was promised from the beautiful harbor of Russell's Hotel. It was also with special satisfaction that my good friend informed me that a very large proportion of the summer travelers to Quebec regularly extend their tours to the Saguenay, and that I was the man who should be blamed for this annual exodus down the St. Lawrence. This was to me a most gratifying compliment, and an appropriate sequel to another which was paid to me in this very city by the Earl of Elgin, who, while I was enjoying a dinner at Spencer Wood, in 1850, exhibited to me a book just received, which was the English edition of my "Tour to the River Saguenay."

Natural History.

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DEER AND DEER'S HORNS.

IN a former number of your valuable publication, and in answer to the question whether deer, when fighting, are apt to get entangled with their horns, you replied in the affirmative. In reference to this subject, I take the liberty of sending to you a couple of photographs taken from horns in my possession and forming part of a choice collection of more than three hundred pairs of horns collected by me during a residence of over thirty years in Texas. During this period I have hunted deer in preference to any other game, and in this manner have acquired some knowledge of the subject in question.

In the rutting season fights among the bucks are of frequent occurrence, particularly where there are few deer in proportion to the land. Their encounters are invariably desperate, and bucks shot in this season often bear the marks of these conflicts, either in the shape of open wounds or spots under the skin, evidently the result of blows received from their antagonists.

The horns are often injured and either single antlers broken off or even the entire beams. The bucks attack each other very much as the bulls of the European fight, and the clash of their horns is often heard to some distance. During this season the hunter frequently succeeds in killing a sly old buck which had outgeneraled him for years. Some of the handsomest trophies in my collection are horns of bucks shot during the rutting season. Before that time, that is to say, before the month of November in Western Texas, the old



bucks are very rarely seen. They browse by night only, and with daybreak disappear in the thicket, not to leave it again until nightfall. The hunter, therefore, but seldom gets a shot at one of them.

But occasionally, when spurred by lust and jealousy, the old buck is tempted to leave the shelter of the woods, to which he is never to return.

Further West, toward the Rio Grande, the rutting season commences later, and not until the middle of December. During an extensive tour which I made in December last to the hunting grounds between the Nueces River and Rio Grande, in company with several friends, we saw but few bucks, owing to the fact that the rutting season had not commenced as yet, the bucks meanwhile remaining concealed in the impenetrable thickets of mesquit brush and prickly pear so characteristic of that region. In January I again went over the same ground in the company of a single fellow sportsman, and we had the good luck to kill seventy-one deer and two weeks of which fifty-three were bucks and only eighteen does. Everywhere the sandy soil showed traces of the desperate conflicts between the bucks, large patches of ground being turned up by the hoofs of the combatants, and in one place I could distinctly perceive that the horns of two bucks had become entangled, and the traces on the ground showed where they had been and the stronger of the two had dragged the other some distance. Undoubtedly they were separated by some lucky accident, as I could discover no further tracks of them.

The deer, in the country between the Nueces and the Rio Grande, feed almost exclusively upon the ever-abundant prickly pear, as do the numerous flocks of fulvous quail in that section. They require only little water, in quest of which they go but seldom. Their color is the darker than that of the deer found further East, which live on grass, acorns, etc.; these latter are generally larger in size, but the former have comparatively larger horns. The fact of their feeding exclusively on prickly pear may account in some degree for their

beautiful, lustrous skins, with a very dark stripe on the back. It is also remarkable that their liver is not of the ordinary dark color, but on the contrary of a light buff.

Both specimens of which I send photographs are curiosities in their way, for, as a general rule, when two deer engage in a fight they rush at each other face to face, and their heads remain in this position in case their horns become entangled. This is nearly always the case. Here is an instance where two bucks were found side by side, like a team of horses, firmly held together by their horns and still alive. The other couple were found with the back of their heads together. One of the deer was already dead when found and the other was speedily dispatched by a bullet, which saved him from a more miserable death by hunger.

A third photograph which I likewise inclose for your use might be of interest to sportsmen and to those desiring to appear in your columns in the shape of a wood cut. The deer was shot in the neighborhood of Austin and the horns are in my collection, which can boast of many other curious specimens. The left beam has twenty-eight and the right beam twenty-four, in all fifty-two antlers. Such a deer is certainly something unprecedented, and, in Texas at least, not to be found again. E. DOSCI.

San Antonio, Texas, May 10th.

A FINE DEER'S HEAD.—Our correspondent, R. S. J., of Menominee, Wis., tells us of a remarkable pair of deer antlers now in his possession. He says:—

"I have in my possession a fine buck's head with large antlers; the left has five points, the right is nearly the same, only a large prong separates near the head on which are six points, some pointing and reaching nearly as far as the nose, while others run out nearly as far as the main horn."

THE STING RAY.

CORPUS CHRISTI, TEXAS, June 14th.

Editor Forest and Stream:—

Inclosed I hand you a product of our waters, which, although common enough here may be something of a curiosity to you. It is the sting ray, commonly called and spelled "sting-ee-ee." This fish is very plentiful in these waters in the spring, summer and fall of the year, disappearing in the winter.

The first cold weather which lasts long enough to put much of a chill on the water sends them to their hiding place, and we see them no more until the warm days of spring have made the water more congenial to them. They either bury in the sand, or hunt deep water during the cold weather.

Excluding the long whip-like tail, the sting ray measures about one-sixth more in width than in length. The one from which the inclosed sting was taken measured about two feet in length exclusive of the tail, and nearly two feet six inches across the back. The tail was nearly if not quite three feet in length.

The sting was about six inches from the body, and lay flat on the tail. It is not a very fancy, capable of being raised in an upright position for aggressive or defensive purposes, but can only do harm by the fish working its tail from side to side, in which case any object in the way is liable to get pierced. This sting in its original condition is covered with slime which is very poisonous, and a ray one wounded by one of them is in great danger from lockjaw. There are several instances known here of death resulting from the wound, and there are many cases where the sufferer has been confined to his bed for months. This fish gives birth to from two to eight at a time. It is covered with a thick, strong, smooth skin, outside of which is a coating of tough slime. It is dark brown above, and white beneath. The two eyes are on top, well sunk in the head and well protected from injury. The mouth is underneath and about three or four inches back from the end of the nose. The gills are slits in the skin similar to those of a shark, and are situated on each side of the mouth, only further back. The cavity for the entrails extends the full length and is almost as well protected as that of a soft turtle.

In fact, this fish looks more like a soft shell turtle, without feet and with a riding whip attached for a tail, than it does like a fish. It is a bold and free biter, and is powerful, giving to the angler fine sport.

It is very cunning when hooked, for as soon as it is hooked and finds itself liable to be vanquished it lays itself flat on the bottom, and the stranger fancies his fish is gone and he has captured a snag instead. Nothing will move the sting ray after he locates himself except a long pole or a very strong line. The mouth is very tough, and a hook has always to be cut out. The flesh is very fine eating, and it is said before the introduction of steam the ray was the only sea fish that was eaten fresh in Paris, as it will live long and keep well out of water, if placed in wet moss. There is a prejudice with many against eating rays on account of their hideous appearance.

They grow to great size, half a ton or more; when of this size, the name changes and they are called devil fish. I have seen these large fellows on a still morning jump out of the water twenty feet and come down flat, making a noise like a young cannon. These large ones are never captured in this vicinity, as they can break any tackle they choose to use.

The largest one I ever captured was about 100 pounds weight, and was between four and five feet across the back. The thorn on the tail measured just nine inches in length. It is not uncommon for them to have two and sometimes three thorns on the tail. They feed on small fish, crabs and shrimp. BEXAR.

WINTER STORE OF THE GRAY SQUIRREL.—Long Prairie, Minn., June 4th.—Editor Forest and Stream:—In a recent issue of FOREST AND STREAM "Sharp Eyes" states his belief that the gray squirrel does not lay up a store of food for winter. I am inclined to believe the gray squirrel is not such a fool as this would seem to make him, and will give my reasons for such belief. My father moved into the State of Indiana forty years ago and settled in the timber, and was brought up among gray squirrels, and the same might almost be said of the writer. Many a time have I watched the gray squirrel ascend a hickory tree, and taking a nut in his mouth carry it to some hiding place and return again for an-

other; but I never followed one up to see where the hiding place for his store was situated, whether in the ground or in some hollow tree. My father has seen them keep this up for hours, and so have I. In winter I have seen places where they have dug into the ground in perhaps a dozen places around one tree, and the fact that these trees were not all fruit-bearing trees leads to the belief that the squirrel had buried something there and knew just where to dig for it. Indeed, the most of the trees around which I have seen these holes were hollow elms, or soft maples, and many times far removed from any nut-bearing trees of any kind. My father and I felled a huge ash one winter in which two gray squirrels had made their homes, and I found perhaps four or five dozen of good hickory nuts in the hollow, and it looks very much as if they were placed there by these squirrels. With all these observations before me, you can count me in as one who believes the gray squirrel lays up his store of food for winter. A. W. S.

FOOD OF THE GREAT BLUE HERON.—This season I killed a large blue heron which had two moccasin snakes in him, one of which was quite large, over two feet long, and fully an inch through; the other, a third smaller. I am of the opinion that all of our large herons eat young snakes, and that this is one reason of the remarkable scarcity of snakes in Florida; another is, that the alligators devour every snake they can catch.

I have known the blue heron to swallow a grown mullet. This last season I killed a heron, and, while carrying him, I noticed that he was unusually heavy, and, when I had got home and skinned him, I noticed that he was full from throat to stern and proceeded to examine him. I found a fish, which was some four inches longer than the body of the bird, and fully half as heavy. How this bird captured the fish and raised him to swallow, I cannot conceive. But, since the foregoing experience, I came suddenly on to a heron on the beach that was busily engaged with a catfish some nine inches long. I could have believed that he might have swallowed the cat, but for the great and formidable fins. He left the fish without ceremony, but I pulled on him and took his skin. Since that time I found a fish in the throat of one, so I am satisfied that they eat both mullet and catfish. The pelican will also take in a full-grown mullet with ease. The cormorant will eat more fish than a person, and it is astonishing what large fish they swallow. Tampa Bay, Fla., July 20th. WM. P. NEILD.

A WHITE KING BIRD.—The following cutting is taken from the Norwich (Conn.) Bulletin of July 19th:—

An interesting *Icterus parula* was discovered on Laurel Hill last week. A king bird, or "tyrant fly-catcher," which, instead of being brown, like its kind, was pure white, except its wings and tail, which were of a creamy hue, stunned itself by some accident and fell in front of Judge Park's residence. It was picked up and placed in a cage, but after three or four days it died, owing, doubtless, to the fact that these birds are insectivorous, and its captors, not knowing its predilections, furnished it with the food of an ornithologist and a taxidermist having been requested to stuff the bird for preservation on Saturday, readily identified its species by its head and other characteristics. It is a handsome but singular specimen.

A NOVEL RAT CATCHER.—Cool Spring, N. C., July 3rd.—At my kennels to-day I killed a water snake, in which I found a full-grown barn rat. The snake measured twenty-two inches in length; head, quarter of an inch across, and three-quarters of an inch long. The rat was in perfect condition, fat, healthy and strong looking. It had just been swallowed, I judge, as it was in perfect shape, coat, preservation, etc. No wounds were discovered on the body of the rodent. A rat is "game" to the death. Query: How could so small a snake catch and swallow so large a rat, and not show signs of a conflict? Again, with so small a "jaw" (and necessarily weak, to hold the rodent) could the snake have killed it in any other way than by coiling around it, thereby rendering the rat powerless? What say our naturalists? E. S. WANNAMAKER.

May not the snake have drowned his prey?

DEEP SEA DREDGING.—The United States survey steamer, Blake, came into Newport last Saturday, after a two months' trip on the Atlantic coast, where she has been engaged in deep sea researches, under direction of Prof. A. Agassiz. The explorations were made between Cape Hatteras and George's Banks. Five lines of soundings were run at right angles to the coast between these points, and a great quantity of zoological material obtained. With the exception of the groups to be worked up at Cambridge by Prof. Agassiz himself, assisted by Col. Lyman, the collection is to be turned over to the same zoologists who have worked up the specimens obtained in former years by the United States Fish Commission on the eastern coast of North America, the crustaceans going to Prof. S. J. Smith; the invertebrates to Prof. E. A. Verrill, and the fishes to Prof. G. Brown Goode and Dr. J. H. Bean.

A CANNIBALISTIC SNAKE.—Mr. C. R. Shaw recently killed, at Sayville, L. I., a black snake which was thirty-nine inches long and about as large as a man's thumb. It appeared somewhat thicker than it should have been, and was more sluggish in its movements than black snakes ordinarily are. On shaking the reptile by the tail, a striped snake, which measured nineteen inches in length, came from its mouth. The smaller snake had been swallowed head first, and was still alive. Neither snake was in a condition to hiss. We do not remember even to have observed a case quite similar to the one above mentioned, though it is not an uncommon thing to find snakes with partially devoured and still living frogs protruding from their mouths.

ANIMALS RECEIVED AT CENTRAL PARK MENAGERIE FOR THE WEEK ENDING JULY 24th, 1890.—Two Arabian sheeps (Arabis arabis), presented by Capt. Goringe, S. S. Dessange; one red fox (*Vulpes fulvus*), presented by Mr. Lawrence Valentine, Mountville, N. Y.; one slug (*Limax flavus*), presented by Samuel W. Francis, Newport, R. I.; one magpie (*Pica pica*), presented by Mr. Morris Loomis; one golden-naped Amazon (*Chrysotis auripallens*), presented by Mrs. D. Leinhard; two Amazon gongs (*Capra hircus*), received in exchange; one mona mona (*Myiophobus mona*); four mauldrils (*Cynopithecus mormon*); one red brocket (*Capreolus rufus*) one Salili's Amazon (*Chrysotis salicis*)—all purchases. W. A. CONKLIN, Director.

Fish Culture.

—Address all communications to "Forest and Stream Publishing Company, New York."

A BIG CALIFORNIA SALMON FROM GENEVA LAKE.—By favor of Prof. Baird we are permitted to publish the following telegram:—

GENEVA LAKE, Wis., July 20th.
PROF. SPENCER F. BAIRD.—A California salmon weighing twelve pounds and three-fourths was taken with a hook from Geneva Lake this morning. N. K. FAIRBANK.

This is an exceedingly large salmon to have been grown in fresh water, for it is not at all probable that the fish ever left the deep, cool waters of this lake to follow the small streams which finally lead into the Illinois River, and so down the Mississippi to the ocean—a glance at the map of Wisconsin and Illinois will show this to be almost impossible. You will find Geneva Lake in Walworth County, Wis., and even if it had been possible for the fish to go down and return it would only add greater interest to its history. This lake is a favorite summer resort, and has been stocked with many kinds of fishes by Mr. Fairbank at his own expense.

We hope for more information as to the sex and development of ovaries, if any, in this fish, for a question yet unsolved is whether the California salmon will develop spawn in fresh water or not. It is known that the males ripen, but we do not think a case is on record where ripe eggs have been found in this fish when confined in fresh water.

WORK OF THE CONNECTICUT FISH COMMISSION.—Dr. W. M. Hudson, of Hartford, one of the Fish Commissioners, gives the following particulars concerning the recent operations of the Commission. During the spring 58,000 young Penobscot salmon were placed in the tributaries of Farmington River. Of land-locked salmon eggs 91,000 were hatched and distributed. The demand for these young salmon to stock ponds and streams was very great, as it had become known that salmon weighing from two and a half to four pounds each have been taken in Hog Pond in Lyme, in Snipe Pond in Rockville, in long pond in Winchester, and in Twin Lakes in Sudbury, and in many others the young fish are known to be growing and thriving finely.

The 110,000 brook trout hatched were widely distributed and the supply was by no means equal to the demand. Arrangements have been made to secure 400,000 young fry next spring. Dr. Hudson says that Connecticut has some of the finest trout brooks in the world, and with proper care and attention on the part of farmers, and a disposition on the part of anglers to save only those of six inches in length or over, our depleted streams may soon be restocked, so that trout shall be as plenty and large as thirty years since.

A test has been made this spring of the practicability of hatching shad in the Connecticut waters. Heretofore all the hatching has been done on the natural grounds at Holyoke Dam, but the committee on fisheries of the last Legislature expressed a desire that all the work for the year be confined to the State. The commission employed Jas. Kaubkin—former fish commissioner—and R. B. Chalker, to test the matter if a sufficient number of spawning shad could be procured. The attempts were made at Wethersfield, Brockway's reach on the Connecticut, and in the waters of Long Island Sound near the mouth of the river. The experiments were made under adverse circumstances—a long, protracted drought, low river and high temperature of the water. With the exception of a few thousand young shad hatched at Wethersfield the operation was a failure. The shad taken were found to be immature, and any attempt to preserve them until ripe in fresh water resulted in their speedy death. It was found, however, that shad taken in salt water in the ponds could be preserved alive and healthy in salt water pens for three or four weeks, and that the females eventually ripen thoroughly. The sharks made sad havoc with this pen, and it was found that the male shad invariably escaped through the holes made by them, so that here, as elsewhere, whether the eggs taken and impregnated under the circumstances would be hatched in salt water. The fishermen are very sanguine that this can be done, but Dr. Hudson cannot agree with them, as too many actual observations prove that the eggs need fresh water for their development and the successful propagation of young fish. The fishermen claim that these pens can easily be protected against shark by an outside netting a few feet from the pen. It may be a practical question whether the eggs of a shad hatched in salt water in consequence of a forcible destruction there, can be extruded into fresh water, brought for the purpose, impregnated, and then taken up the river to hatch in the fresh water, and then develop healthy young fish.

A RECORD OF HATCHING BROOK TROUT.—Connell Boggs, Iowa.—I send you herewith a record of some brook trout hatched during the present season for my individual use, thinking it may be of some interest to your numerous readers. It is as follows: Jan. 25th, 1890, I received of W. L. Gilbert, of Plymouth, Mass., 5,000 brook trout spawn, which arrived here in splendid condition, there being a loss of only sixty eggs while in

transit. I regret that I kept no record of the amount of loss during the process of hatching, but am safe in stating that it was no greater than that sustained in the hatch, of which a record is herein given. On the 18th of February I received from the same place 10,000 brook trout eggs, which were all hatched in twenty-seven days from the day of arrival; a record of which is as follows: Received, Feb. 18th, 10,000 brook trout eggs; temperature on receipt, 53°F.; temperature of water in which they were to be hatched, 54°F.; amount of eggs picked, 140. Feb. 19th, picked 25; Feb. 20th, 10; Feb. 21st, 10; Feb. 22d, 7; Feb. 23d, 7; Feb. 24th, 4; Feb. 25th, 3; Feb. 26th, 3; Feb. 27th, 3; Feb. 28th, 3; Feb. 29th, 3; March 1st, 2; March 2d, 2; March 3d, 2; March 4th, 2; March 5th, 1; March 6th, 1; March 7th, 1; March 8th, 1; March 9th, 1; March 10th, 1; March 11th, 2; March 12th, 1; March 13th, 0; March 14th, 0; March 15th, 1; March 16th, 0; total, 237.

It will be seen that the above statement includes the loss sustained in transportation, and the young fry that died in course of and immediately after hatching. It will also state that no deductions are made for unimpregnated eggs; notwithstanding all this, it will be observed that my hatch is something in excess of ninety-seven and a half per cent. The temperature of the spring in which this hatch was made was 51°F. during the entire time. The water, although never really deposits a great deal of sediment in the form of a sandy loam. These eggs were hatched in the Shalbach hatch, the one of the paraphernalia of which, including the wire screens, are well painted with coal tar. The eggs were in different stages of development at the time of transportation. The 5,000 eggs above mentioned were packed in four layers of about equal quantities; two of these were much further advanced than the others, and bore transportation better, there being only three spoiled eggs and two dead fry.

The young fry from all the above-mentioned eggs are now in a fine, healthy condition; those from the first lot are beginning to feed quite freely, and have fed more or less for the last two weeks. Heretofore I have never given food until the unfertilized sac was nearly absorbed, but with the above-mentioned fish I began feeding at a much earlier period than is usually practiced. The young fry, very early in life, were hatched. I took off the trays and placed in troughs, where the sediment of which I have made mention, was allowed to accumulate, and I gave them for the first few days a slight sprinkling with common salt, and then gradually increased the quantity until now I give them sufficient to form a perfect bed on the bottom of the troughs. This had the effect of perfectly eradicating all signs of dropsy, or blue sac, a disease to which, I believe, all young fry, from eggs that have been transported from a distance, are more or less liable. WM. A. MYNSTER.

HATCHING THE "ANGLER," OR "FISHING FROG."—*Glochester, Mass., Aug. 24.*—Some interesting experiments are being made in hatching the goose fish, monk fish, or fishing frog (*Lophius piscatorius*), at the station of the United States Fish Commission in this place, by Mr. A. Howard Clark, who has charge of the station, and much valuable information concerning the early life and early life of this natural angler has been obtained. One visiting the station can see the eggs in several stages of development, as well as the young fish that have been hatched. In the early stage the eggs are held together by a glutinous substance, which, floating in the water, looks like a thin sheet of jelly thickly dotted with small whitish beads. These sheets are from thirty to fifty feet long in their lateral extent, and float on the surface of the water. The next period shows the embryo formed in the egg, and so on until we come to the fully formed fish taken from the hatching box. The microscope shows that the little wiggler has absorbed the unfertilized bag, and also that there is a good development of mouth, which, in the full grown fish, is the most striking feature, and the extraordinary capacity of which makes it possible to feed on the smallest of prey.

It would be interesting to know just how these "anglers" manage to procure their food from early babyhood until they arrive at that age when they can bury themselves in the mud and patiently wait for their prey to be attracted by their lures within easy reach. But this, together with much more concerning the lives and habits of the different sea fishes, and the little "angler" now, will undoubtedly be more fully understood in the future through the patient researches of those engaged in this field of scientific investigation. J. W. C.

INCREASE OF SALMON IN MCCLLOUD RIVER.—Salmon have never been so numerous in the McCloud River, Cal., since it has been known as they have been this summer, especially about the middle of July, a fact which may be attributed to the work of the United States Fish Commission. Recently Mr. Stone caught seven hundred salmon at one haul, in the open river, and in 1872 and 1873 it was rare that fifty were so taken. The water in the river is higher and colder than it has been since operations were first begun there, and it will be interesting to see how this will affect the spawning of the salmon.

EGGS OF CALIFORNIA TROUT.—The prospects for a fair supply of eggs for the rainbow trout, *Salmo gairdneri*, are good. In the month Mr. Stone fished night and day for breeders, in the McCloud River, and before the season closes may have two thousand of them, which will average three pounds each. These should yield, if no accident occurs, about 500,000 eggs. Over 60,000 young trout were turned into the river this spring from the United States hatching station.

SCISSORS OF THE AUGUSTA FISHWAY.—A 19 pound salmon was captured at Waterville, Maine, Tuesday, July 6th, the first since the fishway was opened at Augusta. The Waterville *Mad* is happy over this capture, and says further:—"Three were seen last Sabbath, and several surgeons are reported to have been seen jumping in the lay. This is evidence that the fishway at Augusta dam is a success; and the prospect is good that with fishways in all the dams above, and with proper rules and regulations, the fish may be restored to their old haunts."

DISCOVERY OF MENHADEN OIL.—According to United States Fish Commissioner Baird, the world is indebted to

a woman for the discovery that the oil of the "menhaden" has much commercial value. About the year 1830 Mrs. John Bartlett, of Blue Hill, near Mount Desert, Maine, while boiling some fish for her chickens, noticed a thick film of oil upon the surface of the water. Some of this she bottled, and when on a visit to Boston soon afterwards she carried samples to one of the leading oil merchants of that city, who encouraged her to bring more. The following year the Bartlett family industriously pried their gilt nets and sent to the market thirteen barrels of oil, for which they were paid at the rate of \$11 a barrel, in all \$143.

Sea and River Fishing.

FISH IN SEASON IN AUGUST.

FRESH WATER.

Trout, *Salmo fontinalis*.
Salmon, *Salmo salar*.
Lake Trout, *Salmo namaycush*.
Land-locked salmon, *Salmo salar*.

Black Bass, *Micropterus salmoides*; *M. pollux*.

SALT WATER.

Sea Bass, *Centropristis striata*.
Sheepshead, *Achochirus probato-*
cephalus.
Striped Bass, *Morone lineata*.
White Perch, *Morone americana*.
Weakfish, *Cynoscion regalis*.

Muskeel, *Esox niger*.
Pike or Pickerel, *Esox lucius*.
Yellow Perch, *Perca flavescens*.
Grayling, *Thymallus tricolor*.
Bluefish, *Pomatomus saltatrix*.
Spanish Mackerel, *Scomber mac-*
ulatus.
Kingfish, *Morone regia*.
Lionfish, *Scorpaenopsis*.
Knapfish, *Morone nebulosus*.

SPAWNING OF THE COLUMBIA RIVER CHUB (*Mylodonchilus lateralis*—Richardson).

SAN PEDRO, Cal., July 13th.

Editor Forest and Stream.—DEAR SIR:—The following extract from a private letter to me, from Mr. Charles J. Smith, of Astoria, Oregon, contains the first authentic account of the spawning habits of the chub, or "sucker," of the Columbia River. I think it may interest other of your readers as it has interested me. Cordially yours, DAVID S. JORDAN.

ASTORIA, Oregon, July 5th.

DEAR SIR:—I returned last night, reaching Astoria at 11 o'clock, from my trip to Klaskanine, and, as a successful expedition, it was a grand success. I shall say nothing of rounding Smith Point on a misty night, with a brisk breeze and a roaring sea, in my little egg-shell of a boat, because the wind was but little interest for you; but if the facts I can give you in regard to these fishes are not already known, I expect to interest you thoroughly before I get through.

They were found on the south fork of the Klaskanine, a quarter of a mile higher up the stream than in my last expedition. The first intimation I had of their proximity was the sight of several dead fish, partly eaten suckers, lying on the stream bed, some a mile or more apart. At some distance ahead I saw them leaping from a large pool, so many that there would be a dozen in the air all the time. The pool was perhaps thirty feet by twelve, and five or six feet deep in the middle, with a long riffle at its upper end; across the middle of the pool, on a line with the water, I found an old grass-grown log. I first walked on the log to where the water entered the pool, and then I saw what I saw. I saw a great many of them. To say that it was solid full of fish would be an exaggeration; but I think there were more than a half dozen to every cubic foot of water in the pool. I now made my way to the head of the riffle, and baiting my hook, allowed the current to drift it under the log. It was taken instantly, and with a vim that showed me that there was something besides suckers in the pool. After a short contest I landed a *Salmo clarkii*, upwards of a foot in length. Looking to the opposite side of the riffle, where the water was shallow, I saw a mass of suckers completely covering a space of six or eight square yards, and dropping the hook among them, in a few minutes one was caught, and in this way I captured a dozen more; but finding this too slow, I next allowed the hook to sink among them, and, when I gave the jerk, I found a short contest I landed a *Salmo clarkii*, upwards of a foot in length. Looking to the opposite side of the riffle, where the water was shallow, I saw a mass of suckers completely covering a space of six or eight square yards, and dropping the hook among them, in a few minutes one was caught, and in this way I captured a dozen more; but finding this too slow, I next allowed the hook to sink among them, and, when I gave the jerk, I found a short contest I landed a *Salmo clarkii*, upwards of a foot in length. They had entire possession of the stream for a quarter of a mile.

In one place where the stream spreads out into a broad shallow basin, the gravelly sides and bottom, they had collected on one side, in a narrow ten yards long by one or two wide, piled upon each other so that at least one fourth were out of the water—a solid, squirming, quivering mass of fishes. Stepping down beside them, I began with both hands to throw them upon the bank, and had I wished, I could have thrown out bushels of them. In the quarter of a mile I saw many such masses, and supposed they were crowding out of the water to receive the heat of the sun, which now shone bright; but when I returned at 4 o'clock the sun was below the tree-tops, and the air was chill, but even more of them were in this position. I found one place where several dead and partly eaten ones showed that even the presence of an otter had failed to drive them away. It may be well to mention that the abdomens of those caught yesterday were much less distended than those of the week ago. I think the spawning is nearly completed. The spawn (milt) of all I saw was thin and white, looking like milk, with no eggs, unless they were of invisible smallness. It is a singular fact—I do not know of its being true of any species of fish except on this coast—that so many of our migratory fishes should die immediately after spawning. Of the small sucker, *Mylodonchilus lateralis*, I saw a considerable number before leaving the river, although they seldom ascend more than a hundred miles. I saw this morning Mr. W. H. Gray, one of the best known men in the State, author of "The History of Oregon," etc., the gentleman upon whose farm I saw these fishes, and beyond whose land it is doubtful if they penetrate, and he says that less than half, but a great many, crowd themselves ashore and die, and a remainder going back after a week or two to the river. Those that I saw struggling upon the bank, and that I think were on the point of performing the last act in their tragedy, though through with spawning, were not by any means sick or diseased, but to all appearances were just as capable of returning to the river as any of

their brethren. As might have been anticipated, the trout fishing was poor, but the few obtained were of good size, and were, I think, *Salmo clarkii*. I have tried to settle a question, whether or not the salmon, the salmon in the Columbia refuse to spawn in the summer months only because of the discolored condition of the river water. To do this I have fished in the upper tide waters of the Klaskanine and Young's rivers, beyond the flow of the river water, but where I have often seen salmon leaping. I have been entirely unsuccessful in attracting their attention, though I have used spoons that last September took four in an hour. I think the truth is, they will only rise to the fly or spoon in water that is clear and salt. In the fall, when the river is low and the tides high, the salt water comes up as far as the city front of Astoria, and that is the highest point at which a salmon has been hooked within my knowledge. Last fall I tried them of Tongue Point, four miles above the city, and though they were leaping all around there they would not touch my spoon. While talking of suckers, I should have said that no one knows whether they come from the sea, or whether they are a river fish, living on muddy bottoms and in tide-land streams, though the latter is thought to be the case. I have no means of knowing whether they are found in any great distance inland, but have been told that they are as high as the Clarkamas. C. A. S.

* Salmon certainly take the hook in the upper waters of the Sacramento, in the mountain streams. D. S. J.

FLY-FISHING FOR SHAD.

SPRINGFIELD, Mass., July 17th.

Editor Forest and Stream.—DEAR SIR:—Your request I have visited Holyoke in order to glean some information about fishing for shad with a fly, and herewith submit my report. I arrived there about 3 P.M. yesterday, and procuring a boat I navigated it to the middle of the river and came to anchor a couple of boat lengths east of the old saw-mill pier, and about the same distance from a boat that contained three pretty lively fishermen, while just beyond them was still another boat, that contained nothing but a solitary hat, as I then thought, for this was all that I could see; but I soon found out that there was considerable life under that broad brim, as I shall describe at the proper time.

Glancing at my surroundings I complacently and with my eyes; so delicately tapered tip did I see. Alas! my beautiful tip, the pride of my heart and joy of my eyes, was not to be found. Some dastardly hand had removed it, and rudely blasted my fondest hopes, for what possible chance of success had I in an encounter with the monsters of the deep without the aid of my beloved tip? After a few moments of bitter grief, sacred to the memory of that departed tip, and the sacrifice of my dignity, and about the same time, I braced up, my shattered nerves and prepared for the coming struggle which, with a prophetic eye, I now foresaw was inevitable, for well I knew that in my crippled condition and fatal weakness in my most vulnerable point, that the bloodthirsty shad would improve the opportune moment to seize my outpost and try to break my line of battle, thus overwhelming me with inglorious defeat. But my loss had made me desperate, and although I could only raise my colors half mast high I defiantly banded them in the very face of the enemy. I had intended to "whip" the stream and endeavor to punish the shad in a sportsmanlike manner, but owing to my misfortune I was obliged to force to do as the noble Romans all around me were doing, and unrelenting a hundred feet or so into line I let it float with the current and saluted it with the signal of battle. Glancing around to see what was going on, I saw that solitary hat give a flop and suddenly shoot six feet or more into the air, as its owner sprang to his feet and started at full speed toward the stern of his boat, where a short, slim stick, to which his line was fast, was impatiently beckoning him on. Never was the truth of the old saying, "the more haste the less speed," so forcibly demonstrated, for no sooner was he than down he went at full length upon the gunwale, with one leg in the river and the other wildly gesticulating in the air. How he ever recovered his balance I failed to understand, but recover he did, and once more essayed to reach the rapidly vibrating stick; but the fates were not through with him yet, and before he was fairly under way he lurched to the starboard and brought up all sitting. I heard the crash of the splintered seat above the frantic yells of our three jolly fishermen in the next boat, and rather expected to see him disappear through the bottom of the boat; but he soon righted up, and, apparently more eager for the fray, he made a grand effort, and succeeded in reaching the goal and grabbing the line, and with many knowing nods and satisfied flops of the huge straw hat he landed his fish and the enormous plaques of the other two who, once in honor of the event, opened some more beer; indeed, they had been doing this all the time, and I had come to the conclusion that they were in mortal fear that the bottles would burst and swamp their boat and give them a taste of water; and to avert the dire calamity they were getting rid of the stuff as fast as possible. Scarcely were the bottles at the proper position when one of the three dropped his, and with a solemn oath he swore that he had "got him." I saw by the swaying of the rod that it was a heavy fish, and expected to see him break away, but I soon found out that no novice held the rod, and after a well-fought contest he was safely brought to net. With pride in his heart and a joyful light in his eyes—for this was his first shad—he victoriously, with the deafening flourish of his companion's fishing rod, and as I volunteered the remark that that was a noble fish he carefully placed his hands under him, and tenderly, proudly raised him up for my inspection. This was a fatal mistake, for no sooner did this crafty *Alosa* again behold his native element than he doubled himself up and with a mighty effort tore himself from the fond embrace, and with a derisive wave of his caudal append-

age, that must have been peculiarly aggravating to the feelings of our hero, he disappeared beneath the cold, dark waves. At this instant—now mark the strategic cunning of this most subtle fish—when I was utterly enervated, and entirely unprepared for the conflict, a huge five-pound monster seized my arm, and, with a voracious scud, this, and at the same time bore down the rapid current. Bravely I rallied my forces to the rescue, but ere my nervous hands had found their cunning and checked his headlong rush, he had forced from me full fifty feet of line. As soon as he felt the killing strain he leaped high in air to reconnoiter the battlefield, and when he discovered who was in command, and caught a glimpse of the vengeful fire in my eye, he became demoralized, and commenced a series of wild rushes and turning leaps that nearly broke my heart, but all in vain were his frantic struggles, for, as I have said before, I was a desperate man that day, and although fearful odds were against me, "with an energy born of despair" I fought the battle to the bitter end, and at the end of forty-five minutes of agonizing pleasure, mingled with cruel doubts and fears, during which I would have given half my kingdom for my dainty tip, and the other half for the landing net which I had left at home, I saw the silvery side turn up, and, irresistibly drew him within reach, and thrusting my finger into his wide open mouth safely landed the gallant fish, and with unpeakable happiness in my heart bowed in acknowledgment to the vociferous cheers that greeted my success.

The fish having now learned to their cost that, notwithstanding my crippled condition, I was more than a match for the best of them, wisely abandoned the contest and let me alone, but ever and anon the music of the humming reel and the pleased ejaculations from the adjoining boats proclaimed abundant sport, and kept me pleasantly occupied till nearly dark. I counted no less than twenty-seven noble fish taken by my neighbors, not including many more that were under size, while many of the handliners lost quite a number of apparently heavy fish. The most taking fly is the scarlet ibis, although almost any of the common trout flies, particularly the different shades of brown and orange, have been successful.

The season opens as soon as the fish arrive, which is about the last of May, and closes Aug. 1st. The present season has not been as successful as usual, owing to low water, yet many fine fish have been captured, some of them turning the scales at upwards of six pounds. I shall try them again in a few days, if I find that tip, and see if there is any sport to be had in "casting," and will report success. SHADOW.

Another correspondent writes from Hartford, Conn., July 24th:—

In your issue of June 24th you published a few notes of mine on shad fishing. I have been trying it again, and this time with much more satisfactory results. I managed to land four in a couple of hours, and should have had more except for a broken hook. I took them with a very light trout rig, and right royal sport it was. My first one took me twenty minutes to land, and the others from ten to fifteen. While not quite so vigorous at the outset they last longer than the black bass; otherwise they reminded me much of that fish in their wild rushes and their way of throwing themselves out of the water. I hope some of your readers will pay a visit to Holyoke next season, as I am sure they will like it, if they have the good luck to haul in a few of the beautiful blue and silvery fellows. They have all the good points of a true game fish. They take a fly, fight hard, require considerable skill to handle, and are game to the last, besides being very handsome. As to their table value I need say nothing. I found a red ibis and a coachman the only flies they would touch. M. D.

FISH IN MARKET.—The first whitefish (*Coregonus*) of the season made their appearance in Fulton market this week. They came from Erie, Pa. The week was also notable for the first appearance of salmon trout, from Buffalo, N. Y. Spanish mackerel made their appearance on the New Jersey coast last Sunday, about one month later than usual; the market is well supplied. Bluefish is scarce; there is no market for them in the Massachusetts coast, about Cape Cod. Sheephead are plenty, a few being taken off Barnegat. The following are the quotations: Salt water fish—Bass, 25 cents per pound; bluefish, 8; salmon, 40; mackerel, large, 18, small, 10; weakfish, 10; Spanish mackerel, 25; green turtle, 12; halibut, 18; haddock, 6; kingfish, 25; cod-fish, 8; blackfish, 12; flounders, 10; porgies, 10; sea-bass, 18; pompano, 75; eels, 10; lobsters, 3; sheephead, 25; soft crabs, 40 to 75 cents per 100; soft crabs, \$1 to \$1.50 per 100. Fresh water fish—Whitefish, 12; salmon trout, 18.

BLACK BASS NOTES FROM "AQUADALE."—I rarely read a FOREST AND STREAM without finding something interesting to note. The first "point" in last week's issue which I note is the controversy about Southern trout, *atlas* bass. Is it not "St. Clair" a "fish" in the assertion that "there never was a black bass in any country that empties into the Atlantic, south of Maryland, and there never will be?" I have in my black bass pond some fine specimens, which I myself brought from the Shenandoah and the Potomac, and I also had some fine specimens on exhibition at the Centennial, which I brought from the Shenandoah. All authorities pronounced them black bass. I have been stocking lakes, ponds and streams with them, both in the New England and the Middle States, supposing them the true black bass, or at least the Southern black bass. A friend of mine, who is an expert angler, has been spending more than a year past in Florida, and writes that he has had fine sport catching what they there call trout, but which are identical with my bass.

Speaking of my bass pond reminds me of an incident which occurred a few evenings ago. There are in this pond two catfishes from California about thirty years old. They appear to be about sixteen inches in length, perhaps some of them are longer. It was about dusk of the evening in question that a party of ladies and gentlemen were watching the swallows taking their evening bath. There were barn swallows, bank swallows and swifts, commonly called chimney swallows. One of the latter glided swiftly along the surface of the water, and had barely left it, when a large salmon sprang after it, com-

ing entirely out of the water, but by the time the fish was out of the water the swift was fully three feet away.

I am frequently in receipt of inquiries as to the preparation of lakes and ponds for brook trout. The last mail brought me such an inquiry from one of the prominent daily papers of your city. I wish here to repeat what I have for years past maintained, viz: that brook trout will not thrive in lakes or ponds. They only thrive well in water, which is undergoing constant aeration. They will live in pure, cool water, like ponds, ditches, etc., but will not thrive without a constant supply of artificial food. Time, labor and money spent in preparing ponds, etc., for brook trout or for stocking such prepared waters with them, will be nearly a dead loss. Parties having suitable sites for such prepared waters should turn their attention to the black bass or the food carp.

I have been interested in the various articles concerning "sights" of hunting rifles. Those of your readers who used to know me during and previous to the war can judge whether I am an "authority." For several years I did most of the gun-repairing for many miles around the place where I then resided. I experimented extensively with rifle sights, and had many rifles brought to me to re-sight. My best success was with a high level back sight, usually made of soft iron, colored a dead blue, and containing a narrow and shallow notch. My best front sights were of ivory, thin and high, and shaped like an inclined plane, the back end nearly vertical.

Noticing in a late issue of the FOREST AND STREAM some queries in regard to fly-fishing for shad, I will say that a few weeks ago I saw several fishermen having line sport just below the celebrated Holyoke Dam, on the Connecticut River. They were all fishing with light colored flies, and were taking shad running from two to three pounds and upward. MILTON P. PIERCE.

Aquadale Ponds, Wenonah, N. J.

The black bass question may now be considered as settled, so far as their distribution in the South is concerned. The very able letter from Dr. Henshall, in our last issue, presented the facts on which all ichthyologists agree, so that even our friend "St. Clair" must see that the bass of the South and those of the North are identical, and that there are but two species. "St. Clair" has evidently been misled by common names, as he mentions the "black bass of the North" as *Centropomus atrarius*, which is a sea fish, which never comes into fresh water. This fish has many local names, Gill giving black sea bass, sea bass (New York); black perch (Mass.); black bass, black fish (New Jersey); bluefish (Newport); black harry, hanna-hills (New York, DuKuy); black will (Eastern shore of Virginia).

Dr. Henshall will soon publish a book on the black basses, a group which this able ichthyologist has been studying for some time.

THE BASS QUESTION SETTLED.—Putnam, July 18th.—The correspondence of St. Clair, "Black Bass vs. Trout," is rather laughable. He says he will stand or fall on evidence, etc., pertaining to black bass being found in Southern streams. Now he will surely have to tumble over this time. In Western Florida there is a stream called Mud River—why it should be called by that name I cannot conceive—for it is beautifully clear, about three miles long, and starts from a large, round, deep spring, which, as is estimated, voids 100,000 cubic feet per minute. The water is clear and cold, and pleasant tasted; the river averages 50 yards wide and is swift, and from ten to twenty feet deep, emptying into the mouth of the Wichawacha River, near Bay Port. The river abounds in bass of two kinds, a kind of lead colored bass often called black bass, and the real black bass. Now I have caught the black bass in Central New York, and New England, for the past thirty years, and am very familiar with the fish, and think I cannot be mistaken; am sure beyond a doubt in my own mind, as experience is one of the best of schoolmasters. Ascending this "Mud River," so called, at about half way from its mouth on the south side is a swift stream twenty feet wide; ascending this some 200 yards, you come to a large kind of pond of some ten acres, and of rocky and sandy bottom. Here the true, real black bass abound. One morning I caught about thirty there, of from one to three pounds weight, the same beautifully proportioned, exactly like those I caught in Central New York. Mr. St. Clair says the "vexed question shall be forever set at rest." A colored preacher in Florida said "forever was a mighty long word, reaching half way up the hill of eternity." "That there never will be a black bass in any Southern streams emptying into the Atlantic," is strong language for our able correspondent to use, and I think our good friend is mistaken, for many times while ascending the Ochlawaha River, in Florida, I have in trolling from the little steamer, caught the real black bass, and I doubt not that many Northern sportsmen have seen or caught them while ascending that stream. G. F. W.

See our remarks on the article by Milton P. Pierce. There are but few men who are capable of deciding on species—certainly those having no knowledge of systematic ichthyology are not—the fisherman and angler only knowing their fishes by their superficial appearance, color and shape. Few of them can tell how their fins are situated or how they are composed, character and situation of teeth, or the many other important points which are of real value. The scientist often doubts his diagnosis, while the amateur never does.

THE KING IN MONTANA.—Upper Maria River, M. T., July 3d.—Editor Forest and Stream.—Yesterday an Indian boy brought me a fish which he killed with his bow and arrow. And as I never saw or heard of anything like it, I will describe it, and perhaps one of your readers will be able to tell us something about it. Length, 10 inches, one fin on each side just back of gills; just back of throat-latch on large, feeler-like fins; 5 inches from nose on back one small fin; 7 inches from nose on back and belly a fin commences and runs clear to tail; tail shape of a flat spoon; general color, a dirty white and black mottled, bright narrow green stripe on each side;

no scales. Kipó, the Indian trader, says he has seen these fish in the Missouri River which would weigh twenty-five pounds; but knows no name for them. The Blackfoot call them "Poke-nak-nah-neks," which means snake-fish, and in truth they look like a cross between a bullhead, a snake and an eel.

The Piegans have been hunting about here for several months, consequently deer and antelope are scarce.

We are making preparations to move to the mouth of the Musselshell River, about two hundred and fifty miles below Fort Benton, where Kipp will start a trading-post with the Bloods, Blackfeet, Piegans and half-breeds. Buffalo are plenty down there, also all other game to be found in Montana Territory, except Rocky Mountain goats and moose.

The fare from Chicago to Fort Benton is only about \$60. I should be glad to see some Eastern sportsmen come up to our new nest next August, and promise them a hearty reception, the best of hunting and lots of fresh, pure Montana air.

I notice a mention of old Liver-eating Johnson in one of your late issues. He is getting old, but is still "game," and has caught some of the species of the Musselshell and Judith rivers, hunting buffalo. I do not think he is dying on Sioux Indian rivers late years. APPECUNSA.

Your description agrees with the fish which bears the following names: "Eel-pout," in Ohio; "ling," in many parts; "losh," among Canadian fishermen, and other names. It is one of the family *Gadidae*, the cod-fishes, and has been called the "codfish of the lakes." Its true name is *Lota maculosa*. Its livers are said to be a great delicacy.

PROBABLY A SUCKER.—Walton, Grand Traverse County, Mich.—Every spring and summer I have caught a few common species of the sucker family, which they resemble the pike of our western ponds. Their nose is nearly on a right line of their backs, which is very nearly straight. They are broad shouldered; their fins are of the color of gold, and they have a dark line running from the point of their gill to the fork of their tail. They bite a fly as readily as a grayling; weight generally about three pounds. The covering of their gills and their head proper are of a sundown tint, interspersed with violet and blue scales, and the scales of the mouth are bright tinted colors. I took one in the month of April and thought I would try his qualities in the pan, and was surprised to find his flesh a bright orange color when cooked, also to find his anatomy to contain only the same number of bones as a brook trout, only smaller in proportion, and the best flavored fish that I ever ate. I think he is the Roman mullet of Pliny. F. M. S. J.

Your fish is probably a male of some species of sucker in its breeding dress, but your description is too incomplete to base even a guess upon. Again and again we say, color counts for very little in determining fishes. Give us the color last of all.

SALMO WILMOT.—Newcastle, Col., June.—Editor Forest and Stream.—I bring and stuffed specimens of a salmon bearing the above name were exhibited at the Grand Dominion Exhibition held at Ottawa in September, 1879. I have searched through several works on American fishes, but cannot find a species named *Wilmot*. I am led to make this inquiry because called Mr. Wilmot, an assistant who named the salmon *Wilmot*. He informed me that Mr. Wilmot was the authority, he having named the fish in honor of himself! I am not aware that Mr. Wilmot, of Newcastle, Canada, is a specific writer on fishes, and even if he is, it is not good taste, or in accordance with the views of true promoters of natural science that the usual etiquette should be violated to satisfy any man's vanity. If Mr. Wilmot's salmon is a good species, it should be described properly, and until this is done, the name is worthless. WM. CUTLER.

There is no fish known to naturalists by this name, neither has there been any description of a new salmon from that region published lately. The salmon found in Lake Ontario and its tributaries are *Salmo salar*.

MICHIGAN FISHING RESORTS.—Cheboygan, Mich., July 21st.—Nearly every week some person is asking in your paper where they can spend the summer, and at the same time make a very good fishing. If they will look at the map of Michigan they will see that our country is the extreme northern county of the lower Peninsula, and I think were they to pay this county a visit they would be perfectly satisfied, as the weather during the summer months is cool and bracing, and the fishing is second to none. We have good hotels in the town, and at the head of Mullet Lake is one of the largest and best hotels in the State. It was built during the past winter and spring, by the Smith Bros., at a cost of thirty-five thousand dollars. It contains one hundred and fifty rooms, and is furnished throughout in the very best style. It is managed by Wm. Spencer, who has had several years' experience in the hotel business in this county, and can put his guests about the best fishing grounds, and will spare no pains to make them comfortable and feel at home. There is a daily line of clinker boats for the use of guests. There is a daily line of steamers running from Mackinac, through Crooked, Burt and Mullet lakes, to Cheboygan, then across the straits to Mackinac. The boats meet at noon at the Mullet Lake House, when the passengers get dinner. Pigeon and Indian rivers empty into the lake about one mile apart, and the hotel is situated about midway between the two rivers, on what is called Pigeon River Bay. In Indian River and this bay there is good trolling for pickerel, black bass and muskallunge. Pigeon River is one of the best trolling streams in the State. The forest around the hotel is full of deer and bear, and Indian River is full of ducks of all kinds in the fall, so that the sportsman in the game season can spend his time very pleasantly without much exertion. T. A. P.

THE CHEMUNG RIVER AND SODAS BAY.—Elmira, N. Y., July 30th.—Responding to the letter of inquiry of yesterday, relating to the sort of fishing to be had in this vicinity, I report as follows:—
Our river—the Chemung—is well stocked with black bass four or five years ago. As a result of that planting, we have had fair fishing for the past two years. Res-nce

taken in moderate numbers (upon "dobson," spoon and fly) from one to four pounds weight. Some fine catches have been reported within the past few days. Sufficient numbers to afford fair sport.

The best fishing ground by water is at Sodus Point, on a bay communicating with Lake Ontario. It is a five hours' ride from here on the Northern Central Railway to Stanley, thence on a branch road to Sodus Point. You leave Elmira at 12:20 P.M., and reach the fishing grounds by 6 P.M. Black bass and enormous pickerel abundant. An this day in receipt of a box of pickerel from there, caught by my son and a companion, containing twenty fish from two to four feet long. They were caught in one afternoon by trolling from a boat, with a spoon. Accommodations ample and good, at a new hotel charging \$7 a week. A boat can be hired for \$3 a week. Boat and boatman to row you, \$2.50 per day. This is the best point for fishing near us.

BORNES.

WEAKFISHING ON THE NEW JERSEY COAST.—*Forked River, N. J., July 31st.*—The delightful time and good sport I had here last year induced me to come again, and I have been here for the last two weeks. The fishing has been and is very fine. For one week I fished, averaging fifty or seventy-five fish a day with the rod, chiefly weak fish and sea bass, the largest day being 113 fish to two rods, with an occasional bluefish, which makes your reel spin around. The weakfish run from one to four pounds, with a great many two and three pounders. Yesterday, though fishied out myself, I took a friend out who had just arrived. Our catch was 102. My friend got a small bag of snipe. I broke the lever of my breech-loader on the way down the bay and could not fire a shot. Provoking, wasn't it? Snipe are beginning to come, and we found several whiffs "trading," as the baymen call it, along the surf. They were surf-snipe, robins and do-itchers. There are a few scattering yellow-legs, but they have not yet come in large numbers. I shot five dowitchers day before yesterday, which I saw from the piazza on the meadows opposite, in about twenty minutes. The charge for boats, unlike most seaside resorts, is very moderate.

D. W. L.

TROUT IN THE FRENCH BROAD.—A Washington correspondent writes me: "I have spent some weeks in Western North Carolina about Asheville, the warm springs on the French Broad and ascending the mountains Black Dome, Craggy, etc. The scenery is magnificent. Not quite so rugged in some ways as the White Mountains, or Adirondacks, owing to the higher timber level, due to the latitude, but the mountains are higher and in such profusion—so many high peaks. As to the fish, I unfortunately made little inquiry, as I was too much occupied otherwise. I caught trout, though, in the small mountain streams. Most of the mountain streams, I think, have brook trout in them. The French Broad, a most beautiful stream, has probably bass. If no one answers your correspondent in the meantime, I can perhaps get him the information shortly."

THE GREENBRIER RIVER.—*Washington, D. C., July 30th.*—I have heard from my old place at Ronceveek, W. Va., that the Greenbrier River is affording good bass fishing this season. The Superintendent of our mill there wrote to me to send him such a rig as he had seen me use there, so that he might try the device fly upon the fish. The latter, he says, run from a foot to as big as you can manage to get hold of. I notice one of your correspondents asks about trout taking a fly in West Virginia in July. Of course they take a fly, but I have found that (having fished West Virginia streams every season from 1870 to last year) in the latter half of July and early part of August the fly-fishing is not as good as later. Late May and June, of course, are best, and then late August. The season expires Sept. 1st.

C. CLAY.

THE BRANDYVINE.—*West Chester, Pa., July 31st.*—Bass fishing has been discouraging here until since the recent heavy rains, but now that the waters are beginning to clear numerous instances of good catches are heard daily. Three and a half pounds appear to be the highest weight of any single fish so far as heard from, while the majority of the fish run considerably below this figure. Young toads, minnows, crabs and helgramites are the most taking baits, yet the bass, when hungry, seem willing to accept anything that is eatable. Have not heard of any being taken this season with the fly.

S.

SALMON ON THE UPPER JACQUES CARTIER.—I should like to ask some of your correspondents in Quebec, who have fished the Jacques Cartier River, whether they have ever taken smolt in the upper reaches of the river, and if so, how they account for their presence there, as the river has never been stocked, and the salmon do not ascend above Sullivan's Falls. At least, I have never heard of salmon having been taken or even seen above this fall. For over ten years I have taken these smolt in the rapids, and have been puzzled at finding them there. Can it be that during the heavy spring freshets some few salmon succumbed in surmounting this fall? It seems almost incredible, as there is a drop of ten feet high right at the head of it.

G. M. FAIRCHILD, JR.

A BIG BLACK BASS FROM THE THOUSAND ISLANDS.—I send you by express this morning a bass caught with hook and line, weighing six and a quarter pounds, which I think is the largest bass I have ever known taken here. The fishing is good; as many as one hundred were taken in a day with a single fly. The small fish that were here in June have entirely disappeared, hence the fishing has improved. Very truly yours,

S. D. JOHNSTON, Clayton, N. Y.

The bass weighed six pounds on arrival, and proved to be a big-mouth (*Micropterus pollitus*), in fine condition. It had a cutish eight inches long in its stomach.

ORGOSS.—*Eugene City, July 22d.*—Fishing on the McKenzie River, twenty miles above here, is good, and nearly all of our anglers are camped on the grounds. Recently two men fishing for a sport caught nine fish, five trout and two bass, weighing five pounds, in a day, and it is nothing unusual for a sportsman who is well up to the business to land one hundred and fifty mountain trout

in a day's fishing. The prospect for good shooting this fall is flattering. Numerous coveys of young blue grouse have been seen, and in the marsh below here, young mallards are by hundreds. Pigeons seem to have deserted our county, as I have not heard of over a dozen being killed this spring. The young of the ruffed grouse are half grown, and are feeding on blackberries. I.G.S.

BASS FISHING IN THE POTOMAC.—*Leesburg, Va., July 30th.*—Before this muddiness in the Potomac, I took at the head of Harrison's Island, in the rapids, nine bass with the caledonian minnow and one bass with the fly, and next day seven with caledonian and one with the fly. I swung the minnow up and across the current, and spun it obliquely down with a fly rod. Had I had a stiffer rod I would have landed more.

T. W.

A RARE FISH.—Mr. E. G. Blackford recently had a specimen of an African pompano, *Trachopterus garcinis*, upon his slabs in Fulton Market, New York. It weighed sixteen pounds, and was served up on Coney Island.

Game Bag and Gun.

GAME IN SEASON IN AUGUST.

Woodcock, *Philohela minor*. Red-backed sandpiper, or oystercatcher, *Haematopus ostralegus*. Black-bellied plover, or oystercatcher, *Haematopus ostralegus*. Great northern gull, or marlin, *Larus marinus*. Ring plover, *Egypus semipalmatus*. Lin. *Limosa fedoa*. Killdeer, *Tringa macularia*. Stilt, or long-shanks, *Limosa macularia*. Tattler, *Totanus melanoleucus*. Red-breasted snipe, *Ammodramus griseus*. Yellow-shanks, *Totanus flavipes*. Mottled sandpiper, *Macrorhamphus griseus*.

"This enumeration is general, and is in conflict with many of the State laws."

"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oystercatcher, surf bird, phalaropes, avocets, etc., coming under the group *Limosa*, or shore birds. Many States permit prairie fowl (pinnated grouse) shooting after Aug. 15th.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE DITTMAR POWDER ACCIDENT.

NEW YORK, July 26th.

Editor Forest and Stream.—We transmit you herewith our Mr. Von Lengelke's report upon the Nash powder, and we adopt his suggestion to invite you, or any representative whom you may name, to accompany him to Springfield, or any other place agreed upon, where the most reliable instruments can be found, or to witness his practical tests proposed in his letter, to verify the report, and we will bear the whole expense of the trial.

July 25th.

DITTMAR POWDER MANUFACTURING COMPANY.—GENTLEMEN:—In compliance with my understanding of your desire, I left for Washington on the 12th inst. I arrived there on the morning of the 13th.

I employed the day in testing the sample of powder which I received from the Forest and Stream sent to them by Mr. Nash, and of which they retained one-half.

I am glad to say that the powder has no excessive strength, and that the accident reported can not have been the fault of the powder.

My experiments were made with the greatest care, and the following results were obtained: I did not try to obtain even pressures, but experimented to find out whether this powder might probably give an exceptional high pressure under certain conditions of pressure and confinement, but entirely failed to detect anything like it.

First trial—The gauge showed a pressure of 25,500 pounds. Second trial—The gauge showed a pressure of 25,000 pounds. I reversed the testing block, twice pressure, and the third showed 25,500 pounds.

I then shot the powder down as much as possible, and heaped the measure a little, and the fourth trial showed 32,000 pounds, the fifth trial, 35,000 pounds.

I then filled the gauge regularly, weighed the same, and also loaded another charge of the same weight, without regard to measure. The result was: sixth, 21,500 pounds; seventh, 27,000 pounds.

The average pressure of all these charges is about 28,000 pounds, which is considerably less than strong black sporting powder, and also less than our standards, which are 20,000 to 35,000 pounds for breech-loading shot guns, and from 25,000 to 30,000 for rifles and muzzle-loaders.

As I have said, FOREST AND STREAM is in possession of the other half of the sample sent, and I think we should invite them, in order to convince themselves and the public of the truth of our assertion, to meet us either at Springfield, or any other place they may be inclined upon, to test the powder which they hold, in order that there may be no question of the accuracy of my tests, or I will, in their presence, shoot from the shoulder from the head to the tail of a duck, or a small bird, or a hare, in the cheapest No. 12 or No. 10 breech-loader they can select in town, weighing 80 pounds, the weight of Mr. Nash's gun.

On July 19th, I also tried some Curtis & Harvey's powder, No. 5. It registered 40,000 pounds.

I also tried the best sporting powders of the leading companies, and found that they showed on an average, not the same pressure as our standard. I think it unnecessary to name the special powders, as it might be deemed injudicious. Nash's powder, you will remember, showed about 28,000 pounds, that is 1500 pounds less than Curtis & Harvey's.

On July 10th I again experimented with the Nash powder, and again had the same results, namely, 12,000 pounds less pressure than Curtis & Harvey's, and have shot 4 and 4 drachm out of my gun, hammered down, without the least unpleasant result. The gun used was a Clayburgh No. 7, central fire, breech-loader.

Yours respectfully,

J. VON LENGELKE.

We wish to make a personal explanation to Mr. Nash. We have never doubted the fact of an accident, nor publicly questioned his description of it. It is true, as you, Mr. Editor, have said, that no two persons ever described an accident precisely alike, and we are willing to give all due latitude to anyone writing under the consequent excitement.

Mr. Nash was wrong to think that we were in a "terrible fever." We had no fear about any powder of our manufacture, but to know the real cause of the accident. We never doubted Mr. Nash's statement of the accident, and we think it unnecessary to discuss the question of explosive force or cumulative force as given out by different explosive bodies. We hold it to be simply apparent to every man who understands the difference between the two exhibitions of forces, that the explosive could not have torn the barrels apart, as we understand the case to have been in Mr. Nash's first letter. There must have been cumulative tearing force there, and that is the only doubt we had of the accuracy of Mr. Nash's description. We did not doubt the fact of the accident.

Mr. Von Lengelke's report is so clear and decided that every man may draw his own conclusions. Curtis & Harvey's powder, giving a force so much greater than

that given by the Nash powder, and the latter falling several thousand pounds below our standard powder, and below the best brands of American sporting powders, we can only ask, what caused the accident?

We adopt the suggestion of your editorial in your issue of the 15th inst., in which you say: "We think the present company are bound to warn the public, by exercising in their power, against the powder manufactured by the old company or companies, since it is evident that this old powder is or may be dangerous." We positively declare that the Nash powder was not of our manufacture, was not sold by us, and was never in our possession. So far as that is concerned, we are interested parties, except inasmuch as it bears the name of Dittmar powder, and we think that our tests have abundantly proved that even that was not dangerous, and fell below the powder which we put forward as our standard.

Mr. Nash's suggestion that the can of powder may have been tampered with is something which we have nothing to do. If it was, it was not our powder that was tampered with.

We shall, following your suggestion, advertise more fully to the world, that we have never sold, nor will we ever sell without due notice to the public, any powder whatever, either under the name of the "Neckers" at our store, or proper directions for its use, and we hereby caution the public against buying any unsealed so-called Dittmar Powder. Yours respectfully,

DITTMAR POWDER MANUFACTURING COMPANY.

We would willingly avail ourselves of the invitation of the Dittmar Powder Manufacturing Company, did we attach any importance to the test proposed as bearing on the point at issue. They by no means show that the accident "cannot have been the fault of the powder," nor do they prove anything, in fact, on the vital question of the safety or non-safety of Dittmar powder. Further than this we must reserve our comments on this letter to another time, and until we have completed our own experiments with the powder.

SATURDAY NIGHT AT THE HEAD OF THE NECK.—*Accomac Co., Va., July 16th.*—*Editor Forest and Stream.*—I am glad to hear that the "Neckers" at our store last Saturday night. After the boys had spun their yarns, in good order, some dropping quail in crossing a four-foot path, resting their arms on fence rails, killing with their guns "kicking up behind and before," bagging coons, opossums, etc., etc., Uncle Mike Jones put in an appearance by stating that his father had often related to him the prowess of his grandfather in the use of a gun, which he had imported from Holland, known as "the old powder piece," and amongst other things, described his wholesale destruction of blackbirds on one occasion, when he swung her around an oak stack, and killed all the way around, the charge terminating in taking off the skirts of his long-tailed blue, whereupon, being an ardent admirer of old "tangle-leg," he proposed a drink.

John Bush, whose inclinations had turned, for several years, toward the "big shot" fraternity, having been a great listener, put in a word, which he said in no way was meant as disputing the flexibility, under curved pressure, of the gun of Mike's progenitor, stated that he, on one occasion, had made a shot somewhat alarming to talk, yet, as there still walked two living witnesses, he would relate that the occasion did not arise by putting his piece in a circular attitude, but that he held it straight from the shoulder, and left dead on the sand 350 assorted birds, curlew, snipe, etc., and in candor believed that as many more fluttered off, wounded, on the water. Uncle Mike spoke up and asked: "If but one barrel?" "Only one." "What size shot?" "Fours." "Two ounce charge?" "About." "Will some gentleman be so good as to count if there are 700 pellets of fours in two ounces." Now, you see that things began to look rather "cornered" for John, and as the old "tangle-foot" was working up to the usual standard of his plain that something would be done for the double purpose of a purpose of making wild pigeons, and after uttering these words in great numbers concluded he had better secure some profits for his outlay. With a double charge in his old fly he lashed it to two posts and lay in wait. When all things were ready, and pigeons had come in such numbers as to lead him to anticipate the need of a wagon to carry off the dead, he gave a grunt to start the birds on the wing, and pulled the cord, when lo! not one bird was left prostrated on the field, having pulled too late by one and three-quarters inches.

"Well," says Mike, "nothing very remarkable about that."

"But I was going to say that he swept up nine and a half bushels of legs and feet."

"Oh! Come, John, come, s'pose we have just one nip and go."

"I don't want any," said Bush; "that pigeon affair is all that I can carry."

T. G. E.

THE GUN IN ENGLAND.—Mr. Richard Grant White has been discussing English social life, in a series of articles in the *Atlantic*, and has this to say about English shooting:—

Next to the horse in England is the gun. Accustomed as we are to see Englishmen who have crossed the Atlantic to visit America, and whose idea of that tour of observation seems to be to go 2,000 miles to the Western plains to shoot, yet to have no adequate appreciation of the importance which shooting, as one of the occupations of life, has in the minds of tens of thousands of Englishmen. Hunting and shooting in England are not mere recreations, forms of casual pleasure, to be enjoyed now and then, leisure and weather serving. In the hunting season hunting men are not content, as I found on talking with some of them, to go out with the hounds

The Kennel.

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TREATMENT IN CASES OF POISONING.

OUR attention has recently been called to a large number of cases of dog-poisoning; but we are pleased to state that the majority of them have been caused by accident and not the result of design. Believing, therefore, that a brief reference to some of the more common and popularly known poisons which our dogs are most likely to suffer, and their antidotes, may be of use to our readers, we quote as follows from Mr. Dalziel's excellent little book on "The Diseases of Dogs":—

Perhaps none of our domestic animals are so liable to suffer from the effects of poisonous substances as the dog; his restless and inquisitive nature, and that inveterate habit of routing into every accessible hole and corner, lays him open to it, while the sporting dog, on duty in places where unsportsmanlike practices prevail, is exposed to special danger. Dog-poisoning is either the result of design—where some vicious or malicious and cowardly person is the perpetrator—or it is the result of the ignorance of persons administering to the animal drugs of the nature and action of which they are ignorant; or from accident, which, properly interpreted, in most cases means culpable negligence on the part of those having to use poisonous substances for the destruction of vermin or other purposes.

Against the malicious poisoner it is difficult to provide; being rarely foreseeable, we cannot be forearmed, and against accidental poisoning much can be done by using reasonable care when it is necessary to use poison. The following will cover the great majority of cases: Arsenic, corrosive sublimate, phosphorus, strychnine, cantharides, carbolic acid, and what of late has caused serious trouble, Paris green. As a general rule, for distinguishing between the evidence of poisoning and the symptoms of disease, the suddenness of the attack must weigh largely; and by tracing where the dog has been, and what he has or is likely to have picked up, a pretty accurate conclusion may be arrived at.

The first step to be taken in most cases is to freely empty the stomach by means of emetics, as tartar emetic, sulphate of zinc, ipecacuanha wine, or, if none of these are at hand, by drenching with lukewarm water and afterwards giving the antidotes indicated, if procurable; but, under any circumstances, give demulcents, such as boiled flour and milk, starch, gruel, milk and eggs beaten up, olive oil, etc., in considerable quantities. A dose of castor oil may also be given, and, if the dog suffer much pain, a dose of opium or laudanum every three hours. Where great depression and weakness follow, stimulants (as ether, wine, whiskey, brandy, &c.) should be given in small quantities at frequent intervals.

ARSENIC.—Symptoms: Great heat and pain in the stomach and bowels, sometimes accompanied with swelling, the belly being very tender to the touch; great thirst; frequent vomiting and retching; more or less discharges of frothy saliva; frequent evacuations of fluid, dark colored matter often marked with blood. The animal soon loses muscular power, to a great extent, showing an inability to move; the tongue, lips, &c., become red and swollen, and the breathing more and more labored and painful. Antidotes: Ferrugo, or hydrated sesquioxide of iron, twelve parts of which combine with one of arsenic, forming an insoluble compound; also light magnesia, which will remove one-twenty-fifth its weight of arsenic from its solution in water.

STRYCHNINE.—Symptoms: Severe, acute pain, making the dog utter sharp cries; frequent twitchings and jerking of the head and limbs; the fore and hind legs are drawn toward each other, and the back is arched; the fits of cramp and twitching are intermittent, but are really brought on by a touch or even sudden noise; foaming at the mouth is also a frequent symptom. Antidotes: An emetic, which should immediately be given, and afterwards butter, lard or other fat in considerable quantities.

PHOSPHORUS.—Antidote: Calomel magnesia, with diluents and demulcents given in quantity.

CANTHARIDES.—Frequently given by ignorant men for purposes, which are defeated, which produces dangerous results causing inflammation of the urinary organs. Symptoms: Violent thirst; copious discharge of bloody mucus from the stomach, mixed with which may be seen the shiny green particles of the flies. There is great pain in the loins, swelling and inflammation of the genital organs, pain in the bowels, and bloody stools and urine. Antidotes: An emetic should at once be given, and the dog should afterwards be drenched with demulcents (such as oil), and a dose of opium given every three or four hours.

CORROSIVE SUBLIMATE is used for a variety of purposes about farms. It is also used for destroying vermin. Symptoms: Violent vomiting and purging of stringy and offensive matter; the belly distended and painful to the touch; the urine suppressed; cramp and twitches in the limbs, and frequently paralysis ensues. Antidotes: Tartar emetic, as an emetic; white of egg, followed immediately by infusion of galls.

Of the medicinal properties, the albumen of eggs is by far the best: the white of one egg is sufficient to neutralize or render insoluble four grains of solid bichloride of mercury.

CARBOLIC ACID.—This produces baneful effects even by absorption through the pores of the skin, when too freely used. It causes great prostration, with trembling of the whole frame. Symptoms: Extraordinary depression of the vital powers; there is general shivering and almost constant trembling of the limbs, and a pained motion of the head; bleeding at the nose is a frequent symptom, and the discharges from the bowels are also often stained with blood. The countenance of the sufferer is expressive of a most helpless and painful state.

PARIS GREEN.—The arsenite of copper; extensively used for destroying the pest of the vine, &c. Symptoms and antidote: See the article on arsenic poisoning. Strychnine and corrosive sublimate, phosphorus and strychnine each enter into the composition of paste and powder largely

used for the destruction of vermin, and it is when so used, being placed on bread and butter, bits of meat, etc., that they are most likely to be picked up by the dog.

DEATHS BY PARIS GREEN.—West Bayston, Mass., July 20th.—Mr. Charles P. Smith's (Waltham, Mass.) orange and white setter Ned died on July 4th, and also Mr. Jerome Marble's (Worcester, Mass.) black and tan setter Nelson. Grouse-St. Kilda, died on July 10th, from the effects of Paris green. Both dogs were poisoned at same time by running through a potato field where Paris green had been sprinkled on the vines to destroy the Colorado beetle. Next morning Nelson was a healthy, not white hair on him, and the very picture of Grouse. Mr. Smith's Ned was a year old and a very promising field dog. J. P. B.

HORSEHAIR FOR "DISTERPER."—In our issue of June 14th we published a communication recommending horsehair as a sure cure for "disterper." our editorial comment at the time being that horsehair cut fine would no doubt create local irritation and rid dogs, to some extent, of worms, but how it would cure "disterper" we utterly failed to see. This, has caught the eye of our friend Mr. Dalziel, who, in his usual happy way, alludes to it in an English contemporary as follows:—

"An American sage has discovered that horsehair is a cure for distemper in dogs. The hair must be taken from the tail of the horse, cut very fine, and a heaped-up teaspoonful given to the dog three times a day in his food until he is cured—the italics are mine."

"Distemper is a term used for want of a better, and is in itself an admission of our ignorance of the disease or diseases it is applied to. I say diseases; for with extended experience of distemper cases my conviction grows that under that name maladies distinct in character and in their symptoms are included. I am much disposed to think that faith in vaccination as a preventive of distemper is to be accepted as justified by results, if, as appears to me probable, dog-pox (which is similar to small-pox in man) is one of the diseases very often classed under the general term distemper. I by no means wish to dogmatize. I admit this to be presumptive only, and I offer the hypothesis to thoughtful and observant breeders with the suggestion that they might greatly benefit themselves and others by carefully noting the symptoms in cases of recurring in their own kennels, giving them in sequence of time, with the treatment adopted, and submitting them for comparison. The kennel columns of all papers devoted to such subjects would be better filled with clear observation of symptoms, etc., of many cases, or an occasional digest of these, with inferences to be drawn from them, than such bald statements of cures with this, that, or the other, which are so often referred to at the opening of this letter, are generally as absurd to the intelligent as they are misleading to the uninformed."

"Horsehair has long held a place, if not in the canine *materia medica* of the colleges, at least in that of kennel men. The hair from mane or tail is from its thickness most suitable; for if very fine it would have no effect, and if very strong, like pigs' bristles, or the label-wire of badger, it would be irritating to the skin. In fact, indeed, there is always more or less danger of it at least causing more intestinal irritation than is sought or needed for the expulsion of worms, for that is the purpose for which it is given. On that account I do not recommend it; but for those who wish to try it, the following will prove a suitable dose for a dog of fifty pounds or so: Cut the hair in lengths of about the 32d of an inch, and give half a dozen made into one or two balls, wrapped in a piece of lint and lean meat well pounded together."

"Cut horsehair belongs to the list of mechanical vermifuges, others being cowhage, iron filings, granulated tin, and finely powdered glass. Youatt strongly recommends the latter; and against the popular belief in the danger attending its administration, he says: 'Not a particle of it penetrates through the mucous membrane of the bowels, while it destroys every intestinal worm.'"

"The dose for a pointer, greyhound, or dog of similar size, is a small teaspoonful, with about ten grains of ginger, mixed with suet or hard butter."

"Before leaving the subject of worm medicines, let me point out how often disappointment follows from the use of inferior drugs, or such as from age or other cause have lost their efficacy. Arecua nut is one of the most useful and valuable of these, but it is not so sound, it cannot be relied on. Last summer I had to pass along one of the principal thoroughfares in the city of London several times a week, and, month after month, I saw exposed in a window a large heap of arecua nuts, many—if not most of them—worm eaten. These were utterly useless as a vermifuge; yet it is generally these that are ground up and sold as arecua nut powder. Let the dog owner beware; and if he wishes to use arecua nut for worms, let him buy the whole nuts, select those that he sees are not worm eaten, and that weigh the heaviest. It will be a sufficiently fine powder to rub these down on a nutmeg grater, although a further rub down in a mortar is to be preferred, especially if intended for puppies."

DEW CLAWS IN ST. BERNARDS.—*La Belle Sauvage* Yard, Lulgate Hill, E. C., London, Eng., July 19th.—Editor *Forest and Stream*:—I have just read Mr. Dalziel's letter to the *Live Stock Journal* in your columns, and as my name appears therein I should like to beg space in which to state how much I disagree with him on the subject of dew claws in St. Bernards. It is all very well for our good friend to talk airily about accidental monstrosities, and to quote letters from the author of the *Descent of Man*, but I only consider it a rise to draw us away from the main point at issue. I have no hesitation in saying that 99 out of 100 St. Bernard breeders here and elsewhere have dew claws when they are bred, and it is when they get a good dog without them that they profess to be indifferent on the matter. People might just as well say that the trace on the back of a pug, the lines up a black and tan terrier's feet, the shortness in face of a bulldog, or the beautiful features of a setter were matters of no consequence, and I dresary Mr. Darwin, or somebody else, would back them up. I fail to see why, because Tell was a good dog, other dogs similarly affected should be given prizes; and Tell, good dog as he was in his day, even if he had dew claws, could hardly win now against our modern champions. One thing I know is, that it will be very much against my inclina-

tion if a St. Bernard without dew claws or a white-colored dog ever wins under yours fraternally. VERO SHAW.

"CARBOLIZED PAPER FOR KENNELS.—Stanley, Morris County, N. J., July 19th.—Editor *Forest and Stream*:—Permit me to call the attention of your many readers, who own dogs, to the best and simplest appliance for relieving both dogs and their kennels from fleas, Caph. John F. Rodgers, U. S. A., discovered that carbolic acid (which is naturally a volatile body and very caustic when coming in contact with the skin) would unite readily with bitumen; also that cloth or paper saturated in this compound was not caustic, and the virtues of the carbolic acid would be perpetuated for several years. "Water Proofed Carbolic Paper" is now being manufactured, and is known to most of the dealers in sportsmen's goods in New York. It costs but ten cents per yard and is clean and healthful. Kennels lined with this paper will always be free from fleas. This paper also affords absolute protection from moths.

GEO. SHEPARD PAGE.
The use of this paper would not be injurious, unless the odor from it is too strong, and the kennel small.

WITHDRAWAL OF FAUST.—St. Louis Kennel Club, St. Louis, July 24th.—Editor *Forest and Stream*:—Please state in your paper that the St. Louis Kennel Club has withdrawn "Faust" from the public stud.

CHAS. H. TURNER, Secretary.

KENNEL NOTES.

NAMES CLAIMED.—Rolla—Mr. C. M. Ogden, of Washington, D. C., claims the name of Rona for Gordon setter bitch out of Mr. C. H. Raymond's imported Juno, by Dr. H. F. Allen's field-trial winner Glen. Glen—Mr. F. McKoon, of Franklin, N. Y., claims the name of Glen for a brown and white bear-leopard bitch puppy, bred by Mr. N. Elmore, of Granby, Conn., out of his Victor and Lucy. Mr. McKoon obtained the bitch in exchange for a fine cocker bitch puppy. Sue—Mr. N. Elmore, of Granby, Conn., claims the name of Sue for his blue-mouthed foxhound bitch, presented to him by Mr. McKoon, of Franklin, N. Y. Sam Weller—Mr. William Stanley, of Endicowd, N. J., claims the name of Sam Weller for his black and tan puppy, out of champion Belle, by Toledo Kennel Club's champion Grouse.

SALES.—Victor-Venus, whelp—Mr. N. Elmore, of Granby, Conn., has sold to Mr. Thos. Blyth, of McIntyre, Pa., a fine English hare beagle puppy, by Victor out of Venus. Mr. Elmore writes that the sale was made through his advertisement in our last issue.

WHEELPS.—Nellie—Mr. Chas. F. Mann's (Worcester, Mass.) black and tan setter bitch Nellie, formerly Mr. F. A. Talbot's, of Dedham, Mass., whelped July 23rd twelve puppies, seven dogs and five bitches, by Mr. F. A. Talbot's Jerry.

PRESENTATIONS.—Elmira, N. Y., July 30th.—I have been presented by Mr. N. Elmore, Granby, Conn., with a fine beagle puppy by Victor out of Lucy. Please acknowledge through your kennel notes and oblige. F. H. WALKER.

The Rifle.

—Address all communications to "Forest and Stream Publishing Company, New York."

COL. BODINE AT HOME.

THE Inman steamer City of Chester arrived in port on Sunday evening last, and after a night spent at quarantine anchorage, Col. Bodine and Messrs. Clark, Rathbone and Fisher, the late American team in Ireland, reached the city. There was no demonstration on their arrival, and the four gentlemen were soon hurrying off to their families. They were all in excellent health, and spoke of their trip as a most enjoyable one from start to finish.

Col. Bodine, in conversation with our representative, speaking of the work in Ireland said: "The day after we reached Dublin the men began to get ready for the match. I suppose our scores looked rather low, but we were not shooting as usual, and for several days of the men had new rifles and the ammunition had not to be tested and tried to get its best effect. There were no flags on the range to show the direction of the wind, for the Irish Rifle Association had but just taken possession of the spot. On the Friday before the Tuesday on which the match was shot, I selected my six men out of the nine, and on that Saturday we had a regular shoot with the men squadded as for a match. The Irishmen had been very confident of winning, and the feeling over there was that we were to be whipped. They judged merely by the scores which we were making. When we rolled up that Saturday score the opinion changed. I never had any doubts of the result. On the day of the match my men worked magnificently. Mr. Donaldson, the Secretary of the National Rifle Association here, kindly went down to the butts to see that the marking was all right. On one target were Clark, Scott and Fisher shooting in order, with Laird as spotter at the target, while on the other target Rathbone, Farrow and Brown were the shooters, while I sat at the glass and watched the shots."

We did not shoot our match as it is usually done, each man following his leader at his own leisure. In place of that we shot in sections. The plan was to send in our shots as quickly as possible; that is, each three men would load and then as fast as one shot, the next would drop down and deliver his fire, taking, of course, ample time to aim. We fired each particular shot as though it was the deciding shot of the match, and I never saw the men kick over the traces. Clark and Rathbone were good leaders, and there are no two better riders for judgment in the world. The light was good, but the wind was fluctuating from S to E, and the wind, what we would call at Creednaur, 'ad rear fish-tail.' The wind gauges were changed between every shot, and often would be moved from a point or two for a left wind to a point or more for a right wind. It was a wind that needed too end of watching, and we were all keenly keeping track of it."

In my official report I think I will give lithographed copies of Clark's record book, made on the range, so that it will enable riflemen to understand precisely the difficult conditions under which the match was shot.

"We received the best of treatment during the match, but toward the end of the match there was a rush of smoke across the

—Mr. J. B. Thayer, of Philadelphia, is spending the summer in Colorado.

—Secretaries of cricket clubs newly organized will please send their addresses to this paper.

THE LAWS OF CRICKET IN THE PAST AND PRESENT.

WE take pleasure in presenting to our readers an illustration showing how the game of cricket was played a century ago. This quaint picture is taken from a little paper-bound book of the Laws of Cricket, brought to this country in 1775 by Benjamin Franklin, now in the possession of the Young America Cricket Club, of Philadelphia. Through the kindness of Mr. Daniel S. Newhall, we are enabled to reproduce the fac-simile, as the original appears in the frontispiece. Unfortunately the history of this valuable little book is not as clear as we would wish. It was presented to the Young America C. C., June 4th, 1897, by Miss Mary D. Fox, of Philadelphia, who gave, through a third party, something of its history, but not definite enough for publication. That Franklin was an admirer of outdoor sports there can be no question, for in several letters of his written while in London, the originals of which are now in the possession of the editor of this column, he mentions having been a looker-on, while a series of matches of cricket were being played, but whether he himself added the accomplishments of howling "grubbers" and "taking a few," to that of kite-flying he omits to state. It may not be generally known that two of the sayings of Poor Richard, most often quoted, were forced from the lips of the philosopher upon witnessing the two days' match, namely: "Never leave that till to-morrow which you can do to-day," and "Dust thou love life, then do not squander time, for that is the stuff life is made of."

To enable those of our readers who are interested in the records of cricket to make a comparison between the laws of the game of a hundred years ago, and those supposed to govern the rulings of to-day, we reproduce below the contents of the little book. This will show with what obstinacy the Marylebone Club



have held to the traditions of the past, and how, from year to year, rules have been added to this mass of incomprehensible patchwork. No beginner, outside of a lunatic asylum, would take a copy of the laws of cricket, as revised by the Marylebone C. C., in 1870, as a guide to play the game. As we have said before, excepting the accounts of the "Adventures of Alice in Wonderland" and the "Hunting of the Snark," the equal of the Marylebone laws for descriptive clearness have never been published. "Fancy a party of beginners," says a writer on this subject, "who had never seen the game played, attempting to learn the laws without other enlightenment. For example, they would never run 'byes' or 'leg-byes,' for the former are not mentioned in the laws, and the only provision regarding the latter" (viz. in Rule XIII—if the ball shall first touch any part of the striker's dress or person, except his hands, the umpire shall call 'leg-bye') "does not suggest running as an essential." The fact is, that the Marylebone Club should put the laws of the game in such a shape that the lovers of cricket can introduce them intelligently in a strange land. They are too primitive, mysterious and incomplete at present. Not a week passes but we are petitioned by some far-away club to send them a set of rules for playing the game, that "they can not make clear to some of the members that the umpire has got anything to do with the decisions, and that some of the laws seem to bear a double interpretation; and although a few may be determined easily off-hand by the least erudite of umpires, there are others which puzzle the most astute."

THE LAWS OF CRICKET.

The Ball.

Must weigh not less than five ounces and a half, nor more than five ounces and three quarters.

It cannot be changed during the game, but with the consent of both parties.



The Bat.

Must not exceed four inches and one-quarter in the widest part.

The Stumps.

Must be twenty-two inches; the ball six inches long.

The Bowling Crease.

Must be parallel with the stumps, three feet in length, with a return crease.

The Popping Crease.

Must be three feet ten inches from the wickets, and the wickets must be opposite to each other at the distance of twenty-two yards.

* By a subsequent appointment, it is settled for to use three stumps instead of two to each wicket, the ball the same length as above.

The Party which Goes from Home.

shall have the choice of the innings and the pitching of the wickets, which shall be pitched within thirty yards of a center fixed by the adversaries.

When the parties meet at a third place, the bowlers shall toss up for the pitching of the first wicket, and the choice of going in.

The Bowler.

Must deliver the ball with one foot behind the bowling crease, and within the return crease; and shall bowl four balls before he change wickets, which he shall do but once in the same innings.

He may order the player at his wicket to stand on which side of it he pleases.

The Striker Is Out.

If the ball is bowled off, or the stump bowled out of the ground.

Or, if the ball, from a stroke over or under his bat or upon his hands (but not wrists), is held before it touches the ground, though it be hugged to the body of the catcher.

Or, if in striking both his feet are over the popping-crease, and his wicket is put down, except his bat is grounded within it.

Or, if he runs out of his ground to hinder a catch.

Or, if in running a notch the wicket is struck down by a throw, or with the ball in hand, before his foot, hand or bat is grounded over the popping-crease, but if the ball is off, a stump must be struck out of the ground by the ball.

Or, if the striker touches or takes up the ball before it has been still, unless at the request of the opposite party.

Or, if the striker puts his leg before the wicket with a design to stop the ball, and actually prevents the ball from hitting his wicket by it.

If the players have crossed each other, he that runs for the wicket that is put down is out; if they are not crossed, he that has left the wicket that is put down is out.

When the ball has been in the bowler's or wicket-keeper's hands the strikers need not keep within their ground till the umpire has called play; but if the player goes out of his ground with an intent to run before the ball is delivered, the bowler may put him out.

When the ball is struck up in the running ground between the wickets it is lawful for the strikers to hinder its being caught, but they must not neither strike at nor touch the ball with their hands.

If the ball is struck up the striker may guard his wicket either with his bat or his body.

In single wicket matches, if the striker moves out of the ground to strike at the ball he shall be allowed no notch for such stroke.

The Wicket Keeper.

Shall stand at a reasonable distance behind the wicket, and shall not move till the ball is out of the bowler's hand, and shall not by any noise incommode the striker, and if his hands, knees, feet or head be over or before the wicket, though the ball hit it, it shall not be out.

The Umpire.

Shall allow two minutes for each man to come in, and fifteen minutes between each innings; when the umpire shall call play, the party refusing to play shall lose the match.

They are the sole judges of fair and unfair play, and all disputes shall be determined by them.

When a striker is hurt they are to allow another to come in, and the person hurt shall have his hands in any part of that innings.

They are not to order a player out unless appealed to by the adversaries.

But if the bowler's foot is not behind the bowling-crease, and within the return crease, when he delivers the ball, the umpire, unasked, must call no ball.

If the strikers run a short notch, the umpire must call no notch.

Notches.

If the notches of one player are laid against another, the bet depends on both innings, unless otherwise specified.

If one party beats the other in one innings, the notches in the first innings shall determine the bet.

But if the other party goes in a second time, then the bet must be determined by the numbers on the score.

LONGWOOD vs. FALL RIVER.—Played at Boston July 19th, and resulted in the victory of the former by 75 runs on first innings score:—

First Innings.		LONGWOODS.		Second Innings.	
Caton, not out.	27	b Travis.	12	b Travis.	12
Mixer, b Waters.	0	b Clark.	0	b Clark.	0
Hubbard, stumped.	0	b Clark.	0	b Clark.	0
Clark.	0	b Travis.	13	b Travis.	13
Wright, b Clark.	0	not out.	51	not out.	51
Tyler, c Clark, b Nutter.	0	b Sharpe.	0	b Sharpe.	0
Jones, b Waters.	19	c Pomfret, b Waters.	3	c Pomfret, b Waters.	3
Dutton, b Nutter.	0	c Nutter, b Travis.	2	c Nutter, b Travis.	2
Sidon, b Waters.	0	b Nutter.	8	b Nutter.	8
Fay, not out.	5	c sub, b Sharpe.	0	c sub, b Sharpe.	0
Young, b Nutter.	0	b Sharpe.	0	b Sharpe.	0
King, absent.	0	b Sharpe.	0	b Sharpe.	0
Byes 5, leg-byes 4, wides 9.	18	Byes 10, leg-bye 1, wides 13.	30	Byes 10, leg-bye 1, wides 13.	30
Total.	105	Total.	150	Total.	150

FALL RIVER.

Nuttall, b Wright.	6	Waters, c Caton, b Dutton.	3
Holt, c Stone, b Dutton.	0	Travis, not out.	1
Nightingale, b Wright.	0	Salles, c Hubbard, b Wright.	0
Clark, b Wright, b Dutton.	0	Sharpe, c Tyler, b Dutton.	0
Pomfret, c Young, b Dutton.	0	Byes 3, leg-byes 2, wides 2.	7
Hyde, c Tyler, b Dutton.	8	Total.	30
Nutter, c Caton, b Holt.	0		

BOSTON vs. FALL RIVER.—Played on the common at Boston July 20th. Won by former on first innings score. The Bostonians commenced a second innings and had contributed 23 runs for the loss of 8 wickets when rain stopped the play. Score:—

BOSTON—FIRST INNINGS.		FALL RIVER—FIRST INNINGS.	
Orlisme, b Nuttall.	10	Nightingale, c Furniss, b	10
Rolle, b Nuttall.	5	O'Hare.	10
Furness, b Travis.	5	Byes 3, leg-byes 2, wides 2.	16
O'Hare, b Nuttall.	1	Nuttall, b W. b Shaw.	5
Lockert, b Travis.	6	Pomfret, b Shaw.	0
Shaw, b O'Hare.	0	Clark, b Shaw.	0
Learned, c Salles, b Nuttall.	0	Clark, c Edwards, b O'Hare.	0
Dale, c Salles, b Travis.	0	Naden, b O'Hare.	0
Edwards, c Salles, b Travis.	0	Sharp, run out.	0
Galland, b Travis.	1	Sydes, not out.	0
Pettit, not out.	1	Windle, b O'Hare.	0
Byes 3, leg-byes 7, wides 4.	14	Leg-bye 1, wide 1.	2
Total.	40	Total.	37

Umpires: For Boston, Mr. Evans; for Fall River, Mr. Burgess.

—The Millbrook cricketers have organized with the following officers: President, W. H. Sowden; First Vice-President, Mr. Kirehoffer; Second Vice-President, Mr. Howell; Captain, Mr. Clarey; Treasurer, Mr. Thomas Cogswore; Secretary, Mr. Weller; Committee, Messrs. Grady, Beatty and Hunter.

MANHATTAN (2d) vs. APPLETON.—Played at Prospect Park, July 17th, and resulted in a victory for the Manhattanites by one innings and 66 runs. Score:—

First Innings.		Second Innings.	
Kelly, run out.	4	b Jackson.	1
Stall, b Jackson.	0	b Hamilton.	0
Swanson, b W. b Jackson.	2	b Hamilton.	3
W. Williams, c Middleton.	6	run out.	0
Hamilton.	0	run out.	0
G. Williams, c McKenzie, b	0	c Jackson, b Hamilton.	5
Hamilton.	0	b Jackson.	2
Nelson, b Hamilton.	0	run out.	0
Ferguson, c Hamilton.	1	b Jackson.	2
Woolenough, c Lawlor, b	2	run out.	0
Jackson.	0	run out.	0
Weslidge, b Hamilton.	5	run out.	0
Heurshill, b Jackson.	3	run out.	0
Wheat, not out.	7	run out.	0
Byes 3, leg-byes 2, wides 2.	7	Byes 2, wide 1.	3
Total.	33	Total.	37

MANHATTAN—FIRST INNINGS.

Vint, c and b W. Williams.	23	Lawlor, c Swanson, b W. Wil-	3
Ames, b W. Williams.	6	lams.	3
Woodhouse, b Swanson.	23	Coyne, run out.	0
Hamilton, run out.	4	Delair, b W. Williams.	0
Mackenzie, run out.	3	Byes 3, leg-byes 2, wides 7.	18
Middletown, b Swanson.	4	Total.	136
Jackson, not out.	4		
Mathews, b Swanson.	4		

HAUGHTON vs. MOERAN.—Return match. Played at Staten Island July 21st, and resulted in favor of the home team by 81 runs.

This was the first appearance of Mr. Edward Kessler, fresh from the cricket fields of Lancashire, Eng. This new member, who has recently arrived from Manchester, at once showed that he is not only a great acquisition to the club, but to the cricketing fraternity of New York. Six bowlers of the Hoboken team alternated before Mr. Moeran unscathed him. During his stay he gave an exhibition of brilliant all-round cricket that is seldom shown by the local players in this vicinity. In his score of 31 he made 4 stupendous smites over the boundary fence into the bay. His leg-hitting was certain and clean, and his cutting finished and well placed. Mr. J. J. Byrne assisted with 24, and Mr. H. Waller, Jr., a chip of the old block, with 19, not out; the innings closing for the unusually large total of 132. For the St. Georges Mr. Hosford and Mr. Moeran, by safe play, contributed 23 and 21 respectively, and Mr. Herriek 10, the side being disposed of for 91. Although 5 of the Islanders handled the ball, the dissolution of the St. Georges' eleven was due to Mr. Haughton's high and home deliveries, 6 wickets being credited to him for the expense of 20 runs. With 81 runs behind, the St. Georges were obliged to follow, and when time was called, at 6:30 o'clock, 3 wickets had fallen for 27 runs.

HAUGHTON'S TEAM—FIRST INNINGS.

J. R. Moore, b Moeran.	36	W. M. Donald, hit wkt, b	1
M. C. Eyre, b Moeran.	10	Sadler.	2
E. A. Waller, c Moeran, b	19	Sadler.	2
A. D. Irving, c sub, b Rich-	0	Sadler.	2
ardson.	0	R. Waller, Jr., not out.	19
H. A. Eyre, c Richardson, b	0	M. G. Haughton, b Sadler.	0
Sadler.	21	Byes 2, leg byes 2, wide 1.	15
J. Hosford, b Moeran.	4	Total.	172
Moeran.	4		

MR. MOERAN'S TEAM—FIRST INNINGS.

S. Hosford, st. Moore, b	23	b M. C. Eyre.	0
Haughton.	0	b Webster.	0
C. Giles, Jr., b Donald.	2	b Moore, b M. C. Eyre.	1
E. H. Moeran, c and b Kessler	21		
A. H. Tabbot, b Haughton.	3		
C. C. Richardson, b W. b	5		
Haughton.	0		
W. C. Ruthertford, c Kessler,	8	not out.	0
Haughton.	0	not out.	0
E. W. Sadler, c Waller, b	8	not out.	12
Haughton.	0		
H. Herriek, b Haughton.	10		
L. Guion, b Rankine.	3		
B. Eyre, not out.	0		
A. Eyre, b Rankine.	0		
Byes 4, wide 1.	5	Bye.	1
Total.	91	Total.	27

THE AUSTRALIAN TEAM.—Mr. James Lillywhite writes us from Tunbridge Wells, July 24th, as follows: "With regard to the Australian team, now in England, I cannot give you any positive information at present. Mr. Alexander, their manager, will write you on the subject. By what I hear, they have not yet settled by which route they will go home, via India or America. They will be playing in this country till September, or perhaps a little later."

AN OUTSPOKEN OPINION.—Macon, Ga., July 17th.—I enjoy your paper very much. I find it greatly improved since I began taking it a second time. The general excellence of all the articles is so much more elevated. In its editorial department it does my heart good to hear the way in which you express your opinion on the subject of selections of international rifle teams, steam catamarans, etc. No "straddling the fence." G. F. P.

LION CULTURE.—The number of lions in Algeria is fast diminishing, and it is expected that the animal will soon be exterminated from the colony. As there is an increasing demand for public exhibitions at fairs and zoological gardens, an establishment has been formed at Bona, by a private individual, for lion-breeding.

It affords us great pleasure to publish the matured thoughts of men by their qualifications fully able to deal intelligently with the question they discuss, whether they agree with us or not. Mr. Colla Archer's letter will be read with attention by all on this side of the Atlantic, as his name is as well known on this continent as it abroad for his valuable contributions to modern naval science. Incidentally we may also point to such examinations as evidence of the universal circulation of *FOREST AND STREAM* as the esteem the journal is held by the best authorities of the day. Our correspondent residing at such a distance

we will not take advantage of the fact and enter upon an argument *à la outcrier*, but indicate the line of thought by which we arrive at our conclusions.

Two things by way of premise, however. We cannot blame Mr. Archer for making us at our word and identifying "power" with "stability." We used the word "power" as it is generally understood among yachtsmen here, as synonymous with "momentum," though in technical parlance there is no connection between the two, "power" among naval architects meaning "stability," something altogether different from "momentum." Like Mr. Archer, we view it far from counselling "stability" as a basis of measurement. It is so clearly the outcome of model, and therefore something that should not be taxed, that we have always set our foot upon anything like measurement by sail area, by area of water line, or the Thames rule, all of which are indices of a vessel's stability. We believe Mr. Kemp once published a table of sail areas showing how nearly the Thames rule measures stability, hence the abnormal tendency among the modern cutter to decrease its stability, and consequently their measurement, in proportion to size, by deducting from beam and adding more rapidly to untaxed size and momentum than to stability by increase of length. We believe with Mr. Archer that the modern cutter, though possessing undeniably good qualities in the most important directions, is not the best type of vessel for the money invested, except when sailing under the rule of measurement which has favored their production so strongly, and that under a more equitable rule more moderate forms would come to the fore, especially where speed is expected. In the three examples given and in the following phases Mr. Archer strikes the key note of the weakness of measurement by three dimensions pure and simple: "The influence of length, breadth and depth in enabling a vessel to set over the ground is very different not only in degree, but in kind, and any formula in which the three dimensions have the same function necessarily offers a direct encouragement to extend that dimension which is of most value for increasing the potentiality of speed." This is incontrovertible and this danger we had foreseen all along. To obviate it we desired to have the three dimensions, rule so modified as to make it virtually the Thames rule minus the bad features. We proposed the adoption of "standard depths" for measurement purposes, such depths to depend upon a consideration of the other two chief dimensions. Such a step would at once remove the tendency to build shallow vessels on one hand, and on the other would deprive the designer of any incentive to extravagantly narrow craft, as the Y. R. A. or Thames rule does by making what we may fairly call the "standard depth" dependent upon only one of the remaining two, thereby checking on one and strengthening the other. But knowing the difficulty of moving great bodies, especially when disorganized, as the American yachting public still is, we deemed it advisable for the time to drop pressing the point for fear of wrecking the whole scheme at the outset by complications which the general public is never fond of. On the principle that half a loaf is better than none at all, we hoped that after the three dimension rule had once become generally adopted, it would be a easy matter to induce the final step of substituting standard depth and avoid the construction of types which are no inducement to increase in the sport than racing. *Ce n'est que le premier pas qui coûte.*

However, these are side issues. We will attempt to lay our course of reasoning in the matter before the reader in concise form.

We take it for granted at the outset that races are sailed as a test of model, and that the object of granting time is to allow a fair test between yachts differing in some initial advantage due to natural causes, and which are not the result of artifice or form. Eliminating extraneous, irrelevant disturbances, let us consider a series of races between two yachts, A and B, in all their variations. A and B are supposed to be built on exactly the same lines, but A the larger of the two. In a fair race A will outstrip B. The difference between them at the finish represents the value of the difference in size between A and B, and is the amount which A should allow B in order to bring about an equitable test of their models. Being exactly alike, they should at the end of our "theoretical race" be placed even at the finish, and this the time allowed B should exactly accomplish. The distance which A has outstripped B is not due to the difference of length in her favor, for beam and depth have been increased in the same ratio and the canvas as well. In other words, while the resistance was increased exactly the same ratio, and yet it *was not* for some *virtue* entirely independent of linear dimensions, *per se*, the yacht A would clearly sail no faster than her smaller sister B. Why, then, has A beaten her?

This is the answer. Upon the assumption that A is twice as long, twice as wide and twice as deep as B, she will experience four times the resistance of B, but her size, displacement, and therefore momentum, will be eight times that of B. It is in this *factor increase in size and momentum in proportion to resistance*, that we have the reason of A's outstripping B, and in this only. Hence a theoretically correct table of time allowance should be constructed upon the value found in practice to attach to various differences of momentum. The fact of A's length being greater than that of B is purely incidental, and to it alone none of the excess of speed over B is to be ascribed. Building time tables upon length is confounding cause and effect.

Further, that length is a deceptive criterion, will appear from the following: Instead of A being built on the lines of B, assume her to be shorter, but yet of greater size—a very likely assumption. A length measurement would saddle B with a penalty, whereas from the foregoing it appears that the natural advantages flowing from greater size are in possession of A, and the latter is the subject for just tax. Let them sail a race as a test of model. Certainly not an exhibit of the superiority of her shape, pure and simple, for she has been added to a certain degree by the momentum due to her excess of size over B. To justly weigh the merits of their models, then, an allowance must be made by A to B. This amount, subtracted from the total distance A has outstripped B, will represent the superiority of the model A.

Should nothing remain after the subtraction has been performed, it indicates that the speed of A and B is exactly alike. If "less than nothing" remains; in other words, if the subtraction cannot be performed, it proves that after eliminating the natural advantages of superior size, and bringing the two down to one level in that respect, A is not only not faster than B, but slower by just the amount by which the subtraction cannot be performed, or what in algebra would be known as a minus quantity.

In each of the previous cases, allowances on length would have brought about exactly the wrong conclusion, and would have handed the prize to the wrong race, that is to the slower model, or at least modified the verdict so much as to rob it of its value to naval architects. This is exactly what we see in America every day, where inferior models win prizes time and again over

ing to time allowance on length working just the wrong way, making a vessel of moderate form pay to one of greater tonnage but of less length, yet inferior in all other desirable attributes of a good vessel.

One thing more. We may have used the terms size and momentum as interconvertible. Above Mr. Archer points out the difference between the two, where he instances the rubber ball and bullet. We have, in advocating a "three dimension rule," taken no notice of this difference, because a given size of vessel will enable the designer to settle upon a given displacement to produce momentum. By Higgs, if a vessel is given a given displacement, it is prepared to abide by a small, large or small, and the result is placement is too large or too small, it is an element of design intentionally executed upon the problem as a whole. Size is the original standard from which he works and which places within his grasp a certain possible speed. What he manages to produce from that size is model, and must sail on its own merits, varying displacements included.

In order to meet the chief objection against bulk measurement made by those who in their haste condemn the seeming incongruity of taxing it when elsewhere actually reducing speed by faulty location, we offer the following for consideration. Bulk is taxed for its *quantity* in the rule, and not at all for its *position*. The objection urged does not hold good therefore. Its position always remains optional with the builder. If he puts it where it may actually be hurtful to speed, it is a matter of model, and if the boat is beaten she is beaten owing to her poor model, which is no reason at all why in equity the builder should be exempt from paying the greater momentum he has had the use of over the whole course, and which, as explained above, is at all times the necessary accompaniment of an excess of bulk, irrespective altogether of its location in the model. To make this still plainer, let us apply it to an example. If A is larger and of poorer model than B, the latter may outstrip A. To obtain a truthful estimate of the worth of their models for speed, it is certainly clear that we must to equity eliminate the excess of momentum which A possesses, due to her excess of bulk. Only when this has been done, when A has been shorn of such natural advantage, will the matter have been reduced to an equal basis, and the actual superiority in shape of B laid bare. To effect this in practice, an allowance of time deducted from practical observation must be given by A to B. The sum total of this allowance, added to the recorded victory of B, will represent the true gauge of B's superiority of shape or model, which was the aim of the race in the first place. This is the rock that most split on, but we trust that after a thorough digestion of the foregoing it will be clear why a vessel's bulk pay for excess of bulk, no matter where found, and why such payment is no wise taxing model, but simply the attainable momentum, the only natural advantage which is inherent to and varies with size, independent entirely of what form it may be put into.

A bulk measurement is the only one devised which is correct in theory, and which leaves the modeller absolutely unfettered in choice of such shapes as will be most conducive to the aims he has in view. When it is deemed desirable to so frame the rule as to encourage a particular kind of making model, or to limit to limitations as required, with less departure from equity and logic than any other, and with no liability to produce what is not wanted or what was not expected.

Text size and you reach the bottom, beyond which no one can obtain any natural inherent advantage not accounted and paid for at the start in the shape of time allowance.

In practice you may then modify the rule to the extent necessary to produce the most servicable type of yacht.

OCEAN PASSAGES.—From our excellent French contemporary, *Le Yacht*, we clip the following concerning the ocean passages made by American yachts:

1871, America, schooner, 170 tons, New York to Havre, 21 days.
1873, Sylvia, schooner, 105 tons, New York to Havre, 16 days 23 hours.
1877, Charter Oak, schooner, 23 tons, New York to Liverpool.
1881, Christopher Columbus, schooner, 15 tons, New York to Cowes, 45 days.
1883, Gipsy, schooner, 135 tons, New York to Queenstown, 19 days.
1886, Albatross, schooner, 27 tons, Boston to Cowes, 19 days.
1886, Henrietta, schooner, 203 tons, Sandy Hook to Cowes, 13 days 21 hours 55 minutes.
1886, Fleetwing, schooner, 204 tons, Sandy Hook to Cowes, 14 days 6 hours 10 minutes.
1886, Venus, schooner, 201 tons, Sandy Hook to Cowes, 14 days 8 hours 50 minutes.
1888, Sappho, schooner, 271 tons, New York to Cowes, 14 days.
1888, Sappho, schooner, 261 tons, New York to Queenstown, 12 days 39 hours 36 minutes.
1890, Dauntless, schooner, 268 tons, New York to Cowes, 12 days 17 hours 6 minutes.
1890, Meteor, schooner, 230 tons, New York to Cowes.
1891, Eucharist, schooner, 233 tons, New York to Gibraltar.
1891, Sappho, schooner, 271 tons, New York to Cowes, 18 days.
1892, Dauntless, schooner, 268 tons, New York to Cowes, 25 days.
1892, Eucharist, schooner, 233 tons, New York to Cowes, 22 days.
1893, Faustine, schooner, 65 tons, New York to Cowes, 38 days.
1894, Viking, schooner, 37 tons, New York to Cowes, 39 days.
1894, Eucharist, schooner, 233 tons, New York to Cowes, 24 days.
Sappho made the fastest run in 12 days 9 hours and 31 minutes. The Charter Oak, Columbus and Gipsy were sold abroad, and the Meteor was lost off Tripoli.

LANCASHIRE WITCH.—From the San Francisco *Call*: "The English steam yacht Lanchashire Witch, Sir Thomas Hesketh, owner, returned from her northern trip on July 10th. The Witch sailed from Cowes, Jaws, and in company with a quantity of salmon, halibut, last, and left on the 15th of April, proceeding to Victoria and Nanaimo, remaining in the latter place a day to coal. From Nanaimo she sailed and steamed to the mouth of the Yukon, where she landed, where a week was spent, and then went North (to Cook's Inlet, where ice prevented further progress for a fortnight. The time was spent in the latter place, and the yacht was then visited, trout fishing being the principal amusement. Mr. Francis started out on a bear hunting expedition, with provisions for one day, and as he was returning, he was attacked by a bear, who he killed, and was finally obliged to subside on seaweed, which he emphatically declares is anything but a palatable dish. Chignik k bears and shot a large number of them. The yacht was then visited, and one large brown bear was shot. Sir Thomas Hesketh, Mr. Francis and Mr. Sadler penetrated well into the interior, and upon their return they were headed for Ugar, and upon a few days proceeded to Monterey and other southern ports, and then return to San Francisco, where she will be related preparatory to her cruise to the South Seas and beyond."

Sharks are unusually plenty in New York Bay this season, many of them even running up into Newark Bay. One measuring nine feet was recently caught at the foot of Bement avenue, West Brighton.

—Spearing sturgeon is one of the sports of San Francisco Bay. A harpoon line is used, and the San Francisco *Bulletin* describes the sport as exciting.

Answers to Correspondents.

No notice taken of Anonymous Communications.

POT HUNTER, New Bedford, Mass.—Send us your name and we will be happy to publish your letter.

HALL, Syracuse, N. Y.—You will find the "Bull Frog" song in the college song book, *Carmine Collegiana*, we think.

T. W., Mansfield, Mass.—For passage to Florida on sailing vessels write to Warren J. Co., 25 South street, N. Y. They run a regular line of schooners to Jacksonville.

C. H., New Hampton, N. Y.—The open season for woodcock in New York began Aug. 1st, with the exception of Oueda and Herkimer counties, where the season does not open until Sept. 1st.

MASS, R. A.—Will the person sending us a letter from London dated July 27th and signed "Mass, R. A." kindly send his proper name, as the article is of too serious a nature to publish anonymously?

M. W., Hoboken, N. J.—Is there any law prohibiting rail shooting in the State of New York, and especially on Long Island? I can find none mentioned. Ans. No mention of the birds is made in the law. No rail shooting to be had on Long Island.

F. B. H., Elmira, N. Y.—For government and railroad lands in Iowa and Minnesota, write to Chas. E. Simmons, Sup't. Land Dept. Chicago and Northwestern Railway, 415 Broadway, N. Y., and to the Commissioners of Immigration of the respective States.

PLUYVER, Boston, Mass.—How would you load a medium choke 10 gauge gun, giving size of shot, for fall plover, at sixty yards? How for coot? Ans. It is impossible to answer such a question as yours. Give the weight of gun. For plover use 8 shot; for coots, 3 or 4.

W. S. S., Pottsville, Pa.—Your setter is out of condition. A mild course of sulphur, followed by 2rs. of quinine three times a day for a week, may do good. Write result. We make no charge for treatment of dogs through this column, and are pleased when we can be of service to our friends.

A. M. R., Clearfield, Pa.—1. To what point of the compass is it best to face a target for afternoon shooting? 2. What substance is used as Creadmore for painting the targets and marking of the bullet marks? 3. Have the sun behind the backs of the shooters. 2. Whiting for white; lamb-black for black. Water or stale beer to mix.

J. H. E., Northumberland, Pa.—My setter bitch has been sick. Her bladder must be affected, as the water drops from her. Her nose keeps hot and her tongue is unnatural color. Please advise me what to do for her. Ans. Open her bowels freely with castor oil and give her drops of tincture of iron in a little water three times a day.

E. G., Albany, N. Y.—Nothing as yet has been definitely arranged about sending an American cricketing team to England next year. But the matter is being seriously considered by the best exponents of the game, and we sincerely trust the venture will be carried out while the Newbells and men of their class are in their prime.

S. H., Lewisburg, Pa.—Can you tell me what to bait with to catch fall fish, and how to fish for them? Also, how to "skitter" with frog, minnow or pork bait? What is the latter? Ans. For "fall fish" bait with worm or piece of fish, use float and fish at middle depth; they take fly at all times. To skitter well, the line should be but a trifle longer than the rod, the bait is cast and by a movement of the rod sideways it is made to skip or "skitter" like a fish trying to escape on the surface. A pork bait is simply a piece of salt pork.

W. A. K., Fort Hamilton, N. Y.—My red Irish setter puppy, seven months, has a continuous jerking and twitching of the muscles and joints. Her hind quarters are so weak from this that they frequently give way under her. She is otherwise well, lively and has a good appetite. The nervous, jerking movements followed what I supposed to be a severe attack of distemper. Ans. The chorea of distemper is very difficult to cure. Quinine and iron seem to be the best remedies. Treat with a grain of the former and one-eighth to one-quarter of a grain of the latter three times a day.

W. Unionville, Conn.—Will you inform me where to find information regarding the carp, what waters they thrive in, and where the young fish can be procured? Ans. The reports of the United States Fish Commission give the most complete information on the carp. They thrive in warm ponds, frog ponds, etc., where there are few other good fish. They are voracious to a great extent. You can get young ones from Prof. R. F. Baird, United States Fish Commissioner, Washington, D. C. It would be best to make application to him through your member of Congress.

P. C., Rhinebeck, N. Y.—I have a foxhound, which I found on my arrival home the other day to be very badly off. The trouble seems to be confined to the head, which, as far as appearance goes, looks all sound, no swelling or eruption of any kind, but there is a discharge from one nostril, which is quite offensive. He also seems to have some difficulty in breathing, and his appetite is gone. Can you tell me what to do? Ans. The dog has, very probably, what used to be called head distemper, and which is of the epizootic form of the disease. Let him inhale the smoke of burning tar, and give him five grains of quinine night and morning for four or five days. Open his bowels with castor oil and keep him quiet; diet light and nutritious.

W. H. N., Newark.—In a rifle match with rules of N. R. Association to govern, A and B compete for prizes at \$60, \$40, and \$200 yards. A has a Remington, B and C have a Remington and a .400 yard stage. A had a "miss-draw," by reason of neglecting to put any powder in his shell, exploding cap only. B followed next, and after firing, found he had neglected to put a bullet in his gun. A and B each claim another shot, while C claims each should be scored a miss. A also claims B is not entitled to another shot on ground that the gun "went off." Which is right? Ans. C is right. A and B both are entirely wrong. A rifle going off at firing point counts as a shot; if it goes not at firing-point, the careless fellow should be barred from the ground.

W. H. W., Philadelphia.—I have a setter dog, four years old, who has always been troubled with a wheezing or asthmatic cough. Of late it has become aggravated considerably. When he starts to run, he brings in a load of mucus; it then ceases. If fed, tugging at his collar will produce the barking or wheezing. He lives in the house, but gets a run of from four to six miles every day; is in good condition for work at all times; is fed from the table, and receives many a little luxury. Will you please suggest a remedy? Ans. Remove the luxuries and give a very plain diet for a time. Medicine is not likely to do any good unless it be a mild purge. The condition you describe often follows an attack of distemper.

G. F. H., Hartford.—I have a setter bitch puppy ten months old, suffering from paralysis of her hind legs, caused by distemper. She is unable to stand at all on account of the paralysis. No running from the eyes arose; in fact, the distemper has troubled her but little at any time, and I had supposed she had recovered from the disease entirely, when this trouble appeared. It did not come on from exposure or over feeding, as oat meal and milk has been her principal diet. Considering her condition she has considerable strength and very good appetite. Have been giving quinine and strychnine, and occasional use of battery. The paralysis has been lasting about two weeks with a tendency of increasing. Can anything be done? Ans. Substitute one-quarter to one-eighth of nux vomica extract for strychnine, and you are doing all that can be done to advantage in such cases.

F. P. D., Jr., Maryland.—Can you inform me if dogs are subject to gravel? I lost a fine English setter several weeks ago; he was only sick two or three days. After death, the examination showed that he had two large stones in his bladder, and both it and his kidneys had mortified and suppurated. I do not understand how he could have been so afflicted. I have owned him three years, and he has not been sick a day. Are dogs subject to this, and is there any cure? 2. Please inform me of the most reliable party from whom to purchase a good, young setter. Ans. 1. Dogs are subject to gravel or stone, just as man is, and from similar causes. The annoyance can be allayed, but the chance of a radical cure is very slight. You have neglected to state the size of the stones; let us hear from you on this point. 2. We cannot recommend any special dog man. We call your attention to our kennel advertisements.

Mons.—Turpentine is a good vermifuge, but apt to inflame the kidneys. To prevent this an emulsion should be formed by mixing it with yolk of egg and olive oil; the dose for a medium sized dog is a teaspoonful. Venice turpentine is a milder remedy. It may be given in doses of a drachm, made into pills with flour or with arena nut powder freshly grated. The dose of nut is two grains to every pound weight of the dog, but no dog should be given more than two drachms. A strong and mature dog should be kept without food for twenty-four hours before giving a vermifuge. Give a tablespoonful of olive oil the evening before giving the vermifuge; and the worm medicine should always be followed by a purgative a few hours later. In the case of tapeworm the remedy or remedies selected must be persevered with until the head of the worm is expelled, and in all cases the worms and all discharged feces should be either burned or mixed with some powerful disinfectant and deeply buried, to prevent propagation of the parasites by their ova.

PUBLISHERS' DEPARTMENT.

A SUGGESTION TO SUMMER TOURISTS.—A change of climate is at all times more or less dangerous. There are elements in a new atmosphere which are injurious, especially when the system is exhausted by care and overwork, and which should be guarded against. After careful observation we have come to the conclusion that Warner's Safe Kidney and Liver Cure is the best preventive for atmospheric evils, and that it will restore health and vigor sooner than any remedy which has ever been discovered.

All orders for my patent rough glass balls hereafter should be addressed to J. Palmer O'Neil & Co., Pittsburg, Pa.

A. H. BOGARDUS.
Bogardus Balls.—All orders received by us for the Bogardus patent rough ball will receive prompt attention. Hereafter these balls will be packed in barrels containing 250 balls, and will be packed as securely as possible to prevent breakage in transportation. The quality of the ball will be greatly improved. Send for prices and sample ball.
J. PALMER O'NEIL & CO.,
Pittsburg, Pa.

FINE GUNS.—For sale, second-hand W. & C. Scott & Son's breech loader; 12 bore, 30 inch, 85 pounds weight, top action, double bolt, extension rib, half pistol grip, horn heel-plate, patent fore-end, large head strikers; cost new \$175; good as new. I have in stock a fine assortment of the celebrated W. & C. Scott & Son's breech-loaders, from the "Premier Quality" (both with and without hammers) down to their lowest grade; 16 and 20 bores of each grade on hand. Also of the world renowned makers, "Westley Richards" hammerless, 12, 16 and 20 bores.

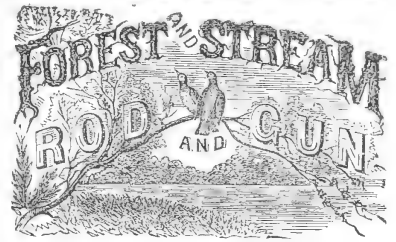
CHARLES L. RITZMANN,
945 Broadway, New York.

To "GUNS."—The advertiser who made use of this pseudonym in these columns some months since is notified that there are a number of letters awaiting him at this office.

THE HIGHEST SCORE.—A Southern correspondent inquires for highest team score, at birds, eight men to the team, ten birds 200 ch. We are unable just at this moment to give this information. Can any of our readers give it?

—A number of Newton, N. J., sportsmen have a clubhouse on Hamburg Mountain, at the Sand Pond.

—In the article "Haunts and Habits of Bears," July 21st, for "Hamilton, Maine," read Houlton, Maine.



A WEEKLY JOURNAL,

DEVOTED TO SHOOTING, THE KENNEL, THE RIFLE, ANGLING AND OTHER FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, AND THE INFLUENCE IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUTDOOR RECREATION AND STUDY.

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Advertisements.—Inside pages, nonpareil type, 25 cents per line; outside page, 40 cents. Special rates for three, six and twelve months. Reading notices on editorial pages, 50 cents per line—eight words to the line, and twelve lines to one inch.

Advertisements should be sent in by the Saturday of each week previous to the issue in which they are to be inserted. We cannot receive new advertisements, nor alter standing advertisements later than Tuesday morning.

Correspondence.—Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention.

Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

Address.—All communications, of whatever nature, relating to the business or editorial departments of this paper must be directed simply FOREST AND STREAM PUBLISHING COMPANY, New York City, N. Y.

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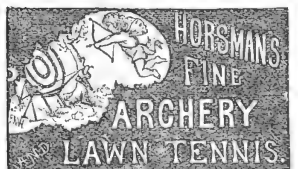
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Ostrich Farming.

ACTIVE OR SILENT PARTNER wanted, with \$20,000 to \$50,000, to join a young man in the above business in San Joaquin Valley, California. Advertiser has had long experience on ostrich farms in South Africa; thoroughly understands the business in all its branches, such as mating, care of breeding and feather birds, rearing of chicks, and sorting feathers for the London and Paris markets. Large profits can be derived from the investment; more money in it than sheep or cattle ranching. Any person answering this with intention of acting as active partner must be strictly temperate; none others need apply. Best of references given. W. D., Occidental Hotel, San Francisco, Cal. Jy-29-It.



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Is Indorsed and Highly Recommended by E. H. Thompson, Father of Archery in this country; J. W. H. Thompson, Jr., Champion Archer of the United States; Louis C. Orger, Esq., President of the National Archery Association; A. B. Bromley, Esq., President of the American Archery Association; and other leading Archers. Special attention is called to Horsman's Famous New-Backed Bow and fastest pointing Feathered Arrow. Send stamp for Illustrated Catalogue of Archery & Lawn Tennis.

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THE GREAT REDUCTION in the quality of this article, and the increasing admixture of rough strands, has forced us to go into the manufacture of it for our own account. Our Mr. Imbrie has just returned from Murcia, Spain, where all the high quality gut is made. While there he organized the most extensive and perfect factory for making this article in the world. The grades named below will run at least 25 per cent better than those of any other manufacturers.

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Corta	\$1 00	Padron 1st Superior	7 50	Regular Superior, 16 inches....	12 00
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Taxidermists and Naturalists.

I have the largest and best stock of artificial eyes for birds and animals in the country, and have greatly reduced the prices.

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SUITABLE for Yachts, Dingies, Sportsmen and family use. Folds up less than six inches thick. Light, cheap, strong, portable, the model. Send for circular. The new pattern HUNTER'S BOAT—roomy, easy to row; weight complete, 25 lbs. Price, only \$30.

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FOR SALE, An Earthly Paradise. PLEASURE, HEALTH, HAPPINESS.

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FOR SALE—One Stevens' single barrel shot gun, fine quality, lot of shells, etc., cheap. F. H. PARKER, Ashburnham, Mass. July 29

FOR SALE—A W. & C. Scott & Sons' breech-loading shot gun, 28-inch Damascus barrels, 12-gauge, 6 pounds, nickel gun, remaining locks, patent fore end, and all the latest improvements. Bought new in May last, in perfect condition and in first-class shape. Will sell for \$15, if taken soon. CHAS. F. KENT, Birmingham, N. Y. Aug. 5/80

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WANTED—Cheap for Cash—A double breasted, loader, six pounds or under; must be in good condition. P. O. BOX 1,233, Philadelphia, Pa. Aug. 5/80

WANTED—A lot of Florida bird skins and money feathers. H. B. ALLEN, Jr., Gloucester, N. J. Aug. 5/80

WANTED—A partner with a capital of \$3,000. To engage in the manufacture of a new and useful sporting rifle. Can be manufactured for less than \$3, and sells readily for \$10. Can change a breech-loading shot gun into a rifle in less than five seconds. Does all the execution of a wide-range rifle. Weighs only 6 pounds, and is the lightest in the world. The cost, address JOHN BOWLES, Patente, Washington, D. C. Aug. 5/80

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Swedish Insect Powder. SURE DEATH

To Roaches, Bed Bugs, Fleas, Insects, etc., etc. Contains no poison that is hurtful to the human family or domestic animals. Put up in packages with our own warranted seal. Requires no powder gun. WARRANTED TO DESTROY FLEAS and perfectly eradicate all the vermin pests of the house. Address JOHN BOWLES, Patente, Washington, D. C. Aug. 5/80

VALUABLE DRAFT OR NEWLY SETTERS AND POINTERS, OF THE CONESTOGA KENNELS, FOR SALE.

Rack, a handsome red Irish setter; thoroughly broken; is one of the best on woodcock and quail; has a good breath; price \$100.
Von, a handsome red Irish setter dog; thoroughly broken; a good retriever from land and water; price \$100.
Brush, a large, handsome, nearly pure white setter; thoroughly broken; can be found anywhere; price \$100.
Belle, a beautiful, true blue Belton setter, by champion Carl, with true brother to champion Royal Duke; partly broken; price \$100.
Royal Ben, a large handsome lemon Belton, by champion Carl; a winner of first and special at St. Louis, Mo., and at Detroit, Mich.; partly broken; price \$100.
Belle, a handsome orange and white, thoroughly broken pointer bitch; price \$75.
Cyde, a liver and white pointer bitch; is a stand in the field in whelp to Ruck; price \$75.
Imported liver and white pointer bitch, Nell; in whelp to Buzz; price \$100.
Belle, a pure Laverack bitch, Vietress, imported by L. H. Smith, of Canada; in whelp to Royal Ben; price \$100; a bargain.
Belle, a handsome lemon Belton bitch by Belle ex Warwick; a beauty; price \$75.
Orphena, a liver and white, by champion Prince of the Border and ex-champion Nellie, with 2 handsome dog pups, now 10 days old, by Royal Ben; price \$75; a beauty.
Lola, a pure Laverack, 1 year old, out of Blue Prince, a pure Laverack; ex Nettowitz; price \$60.
Tysie Queen, a handsome, large, blue Belton bitch, out of champion Gladstone ex Clipp in whelp to Royal Ben; price \$200; a beauty.
Imported red Irish prize bitch Floss; price \$75, cheap.
Lady Beatonfield, a beautiful black and white bitch, out of champion Leicester and Orphena; price \$75.
Belton bitch Belle, a handsome and extraordinary fast; price \$75.
Lola, a handsome white setter bitch, stand in the field; price \$75.
Belle, a handsome lemon and white bitch, out of Russia and champion France, a beauty; price \$75.
Belle, a handsome red Irish setter, 15 months old; price \$25, very cheap.
One brace of handsome blue Belton pups out of Belle ex Warwick; price \$20 each; 3 months old.
One brace of handsome red Irish pups, 4 months old, out of Nell ex champion Von; ex Belle (Thompson, N. Y.); price \$30 each.
One liver and white dog pup, 8 weeks old, out of Lady Beatonfield, ex Royal Ben; price \$15, cheap.
One brace bitch pups, 10 weeks old, out of Lola, ex Robin Hood; price \$20 each.
Four handsome liver and white pups, out of Peri V. and Brussels, full brother to champion Paris, now 10 weeks old; price \$20 each.
One yearling dog will be sold to the first buyer that comes, and to give satisfaction I will take every dog and meet the buyer in any way to give him provided his expenses are paid, to be deposited in the hands of this office.
For pedigree and particulars inquire of C. Z. MILEY, Lancaster, Pa.

DEARLE PUPS—One fine dog pup, three and one-half months old by "Victor" (three and one-half months old) by "Venus," \$10. Four beautiful bitch pups, six weeks old, out of "Lucy" by "Victor," full pedigree, \$10 each. One brace bitch pups "Bunny" by "Victor," ready to deliver Aug. 15th, \$10. Also, one two year old foxhound pup, \$6. Safe delivery warranted and satisfactory reference given. Address N. E. MOORE, Granby, Conn.

The Kennel.

Imperial Kennel

Setters and Pointers thoroughly Fied Irish and English Dogs handled with skill and judgment. Young dogs daily sent to salt water.

N. B. Setter and Pointer puppies; also, broken dogs, full pedigree. Address H. C. GLOVER, Toms River, N. J.

FOR SALE—Three handsome red Irish setter pups, eight weeks old, large, strong and healthy, out of Nora, she by champion York & Belle; and one brace of handsome Llewellyn pups out of Belle, she by Prince of the Border & Kirby and Warwick, both parents being thoroughly broken and prize winners. Prices reasonable. For particulars inquire of the CONESTOGA KENNEL, 232 East Orange street, Lancaster, Pa. June 17/80

RORY O'MORE KENNEL—A champion Rory O'More in the stud. The handsomest, as well as one of the best field and best bred red Irish dogs in the United States. Winner of first prize at New York 1877; champion York & Belle; 5th champion at Hudson, 1879, and winner of the gold necklace at New York, 1880. For sale, with full pedigree, by the owner, L. CALLEN, DEL. Albany, N. Y. June 17/80

LACHINE KENNELS.

I HAVE moved my kennel of cockers to the vicinity of New York. Will have pups before October. Corn, Fiat, Madcap, all to be bred to Bijou, this week, June 21st. GEO. MACDOUGALL, P. O. Drawer 432, June 21/80 New York.

E. B. GOLDSMITH,

Custom House and Forwarding Agent,
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RECEIVES AND FORWARDS DOGS. Punks, etc., to any destination. Kennel Clubs, Sportsmen and others, intending to import dogs from Europe, should have their stock consigned to him. Information furnished gratis to the best methods of importing, shipping, etc.

PINE LODGE KENNELS—I am prepared to take a limited number of dogs, either setters or pointers, and train them thoroughly. I give pupils seven months' work out of the twelve, and guarantee satisfaction, if they do not naturally improve. Prices, \$20 and \$25, according to length of time I keep the dog, with discount for cash. Address A. WINTER, Cairo, Thomas County, Georgia. Oct 2/80

FOR SALE—A red setter dog puppy, ten months old, by Blake, out of Belle II. Rakey by Dr. Gautier's Dan and Laverack's Ruby. Belle II. out of Dr. Strachan's Dan II., out of same owner's Belle. The puppy showed great ability in an extra fine field dog, is very handsome, and in good condition. Address X. Y. Z., this office.

WANTED—One or two dogs to train for Field Trials. M. VON CULIN, Delaware City, Del. June 21/80

K 9 KENNELS.

BREAKING, breeding, boarding. Large stream on the place, and daily access. Best feed and care. Terms easy. Inquire stamp. By mail, K 9 Kennel Club, 200 K 9 P. O. Box, 250. Kennels one mile from Dover, Del. Address E. C. VON CULIN, Dover, Del. P. O. Box 218. June 21/80

PEDIGREES—For samples and prices send two free cent stamps to M. VON CULIN. (See above.) June 21/80

Fleas! Fleas! Worms! Worms!

Steadman's Flea Powder for Dogs. A BANE TO FLEAS-A BOON TO DOGS. THIS POWDER is guaranteed to kill fleas on dogs or any other animals, or money returned. It is put up in patent boxes, and is simple and efficacious. Price 50 cents per box by mail. Postpaid.

ARECA NOT FOR FORMS IN DOGS. A CERTAIN REMEDY. Put up in boxes containing ten powders, with full directions for use. Price 50 cents per box by mail.

Both the above are recommended by ROYAL GUN and FOREST AND STREAM.

CONROY, BISSET & MALLESON,
65 Fulton Street, N. Y.

HENRY C. SQUIRES,
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WANTED—A well-bred Cocker Spaniel, thoroughly broken on woodcock and quail, ruffed grouse and to retrieve waterfowl; must be able to send dog on trial—expenses to be paid by me. I wish only a dog that is perfectly broken and understands his business. Address S. S. Southampton, L. I. Aug. 1/80

ENGLISH BLACK SETTER FOR SALE.—Three years old, shot over last season; is thoroughly broken and a good worker; retrieved from land or water, and must be sold for want of use. Can give good pedigree. Price, \$25. ELWELL, Lawrence, Mass. Aug. 1/80

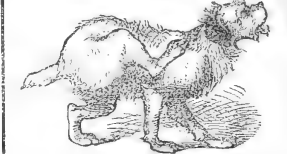
FOR SALE—A thoroughly broken English setter four years old; has been hunted by a market shooter. Address F. C. FOWLER, Modous, Conn. Aug. 5/80

WANTED—A good rabbit dog, cheap, either beagle or mixed blood. Address, with particulars, H. WISE, Mt. Prospect ave., Newark, N. J. Aug. 1/80

The Kennel.

Cathery's Dog Soap,

PRIZE-MEDAL.



C. CATHERY, LONDON.

FOR WASHING ALL KINDS OF DOGS. Will destroy Fleas, cleanse the skin and hair from Scurf and Smells, making the Coat fine and glossy, without giving cold or doing the least harm to the animals and safety and effectively cure the Mange.

PRICE, 50 CENTS.
FOR SALE BY ALL DRUGGISTS.
Wholesale Agents,
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NEW YORK.

Sample Cake sent on receipt of 50 cents.
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Same sire and dam, one year old, very handsome and perfect in every way; will be capital workers. I reserved them for my own use, but I have more dogs than I can handle, and will part with them. Price \$15 each, or \$125 for the pair. 3221 VAN WAGENEN, 212 West street, New York City. July 15/80

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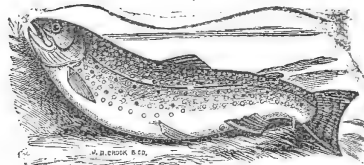
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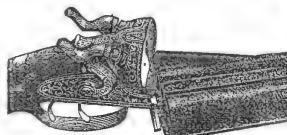
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Ammunition, Etc.

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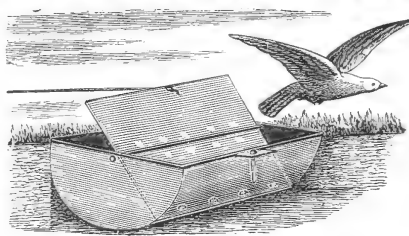
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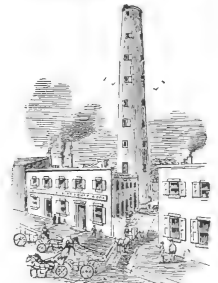
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FOREST AND STREAM

THE AMERICAN SPORTSMAN'S JOURNAL.

(Entered According to Act of Congress, in the year 1878, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington)

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NEW YORK, THURSDAY, AUGUST 12, 1880.

Volume 15—No. 2.
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FOREST AND STREAM.

NEW YORK, THURSDAY, AUGUST 12, 1880.

ADVERTISEMENTS.—Advertisers are respectfully requested, in all cases where it is possible, to send in their advertisements by Saturday of each week before the issue in which they wish them to appear. We cannot receive new advertisements, nor make changes in those already standing, later than Tuesday morning.

WILD RICE.—We are in receipt of numerous inquiries for wild rice. At present none is in the market; it is too early. When the harvest is gathered, those who are collecting it will give due notice in the FOREST AND STREAM. We shall then repeat full instructions for its sowing.

PALACE CARS FOR SPORTSMEN.—The cars "Davy Crockett" and "Izaak Walton" are fitted up expressly for the convenience of sportsmen. As there will probably be a great demand, this autumn, for these comfortable moving hotels, we recommend our friends to apply early to the Pullman Palace Car Company, in order to secure their accommodations without fail.

—Those who read Porter's Spirit long before the FOREST AND STREAM was published will recognize in "Rough Notes from the Woods," published to-day, the same pleasant chat that "Nessumuk" used to contribute to that journal. We have further notes on hand, and shall publish them shortly.

—The leader of the crew making the reprisal, related by "Avalhooose," is now a fish warden—evidently the right man in the right place. The moral of that tale, by the way, is not wholly for poachers; it may well be applied by organized or non-organized game protective societies. If a net catches fish when fish should not be caught one remedy is to burn the net.

THE MICHIGAN SPORTSMEN'S ASSOCIATION.

THIS is one of the best organizations of sportsmen in America. It is what all such associations should be, a protector of fish and game; and its deliberations are of the most interesting character, comprising essays upon all subjects which come within the scope of the organization and which are followed by discussions. We are in receipt of their third annual report of the fifth annual session of the association, which was held at Bay City, Feb. 3d to 5th, 1880, a neat pamphlet of one hundred pages, to which is appended a synopsis of Michigan game, fish and allied laws. Instead of being a mere pigeon shooting club, it devotes its time to considering the habits of fish and game, the laws for their protection during such times as an increased knowledge of their habits requires, and even the introduction and acclimatization of such species as may seem suitable to the climate of the State. At the last meeting President Holmes, in his address, while of the opinion that the migratory quail, *Coturnix vulgaris*, was hardly suitable for their State on account of its habits, which might impel it to leave for a warmer clime as soon as the young were fit to travel, strongly recommended the introduction of the "gray partridge" of Asia and Africa, *Pardus cinerius*, as an addition to the game birds.

A paper by Mr. Fred Mather was read, appealing to the association to save the grayling from extermination, and citing cases where the spawn of this fish had been artificially taken and the young reared in this country, notwithstanding there was an impression abroad that this had never been done. Mr. Geo. H. Jerome also wrote a brief note on the same subject, and Mr. McLean advocated the right of the settler to kill game to supply his wants, to which most of the members gave assent. Mr. Frank Clark gave his experience in bringing East and breeding the rainbow trout, *Salmo iridea*, with which he had been very successful.

The Committee on Nomenclature made a report which was followed by that of Mr. E. H. Gillman, chairman of the Committee on Sporting Dogs, in which he treated dog culture, management and field trials, in a very able manner, and to which we had occasion to allude in a former article. Mr. J. G. Portman, Superintendent of Michigan Fisheries, read a paper on fish culture in the State, in which he spoke of the attempt to introduce shad into the lakes, the land-locked salmon, the eel, the trout, the whitefish and the carp. The eel had been planted to the extent of about 700,000 in the years 1877-8. At the Pokagon hatchery Mr. Portman has hybrids of *Salmo fontinalis* and *S. namaygush* which are fertile.

Following the report of the Committee on Laws for the Protection of Game, Mr. C. W. Higby read a paper upon the subject, in which he advocated reducing the market value of game by preventing its shipment out of the State, or shortening the time in which it was allowed to be killed; also to pass a law punishing persons who killed deer for the skins and left the carcasses to rot. The question of shortening the open season for deer by making it from Oct. 15th to Dec. 1st, instead of, as at present, from Sept. 15th to Dec. 15th, was by general consent, allowed to lie over until another year. Mr. D. H. Fitzhugh, Jr., then offered a resolution of regret at the death of Prof. James W. Milner, of the United States Fish Commission, and an obituary paper was read on the death of Dr. Thomas A. Brewer. Senator Palmer referred to the custom of shooting pigeons from a trap, and hoped that the association would discountenance it, whereupon Mr. Colburn showed that the association had never recognized the question of trap-shooting as a legitimate one for discussion in its deliberations; that the association had more important business in hand than the agitation of a question which would only serve to bring discord into the convention and cripple its effectiveness for good, the opinions held by the members upon this subject differing widely; and closed by quoting from Mr. Mather's paper his sterling compliment to the association, in which he pronounced it one of only three clubs in the United States whose meetings are for the

protection of game instead of pigeon slaughter and shooting for prizes.

The good that it is possible for the Michigan Sportsmen's association to do is almost unlimited, and we are glad to see that its work is meeting with appreciation, an evidence of which is the increased demand for its published reports, which in 1878 was only 1,000 copies; in 1879, 1,500, while the present year witnesses an edition of 2,000 copies distributed gratuitously to Michigan sportsmen and to all others who are thoughtful enough to inclose a stamp. This is doing excellent missionary work and is well worthy of consideration by all bodies of sportsmen who desire to elevate not only their sport but themselves from the mere routine of slaughter, shooting and fishing for count and for brag, to the highest level of sportsmanship which propagates and protects the game for the sake of healthful recreation in forest and by stream, and which never allows sport to degenerate into slaughter nor approach extermination.

SIXTEENTH CENTURY DOG LORE.

THE "four good dysportes and honest gamys that is to wyte, of huntynge: hawkyng: fysshynge: and foulunge," must have held a high place in England in the Fifteenth and Sixteenth centuries, for some of the first laborious and clumsy efforts in printing were devoted to rehearsing their merits and to instructions for their pursuit. English books of sport are almost as old as the English printing-press. The first press established in England was that of Westminster in 1477, after which came, two years later, that of Oxford, and the third at St. Albans in 1480. We do not know even the name of the first printer of St. Albans: we only know that he was a schoolmaster, for Wynken De Worde, who reissued one of his books, tells us that the original was printed by "one sometyne scolemayster of Saynt Alboun," and we could wish that more than these meager details had been left to us of one to whom, even at this late day, sportsmen of antiquarian tastes owe so much pleasure. For among the eight books—six of them devoted to education—printed during the six or seven years after 1480, and before the worthy man relinquished his new labor for the old work of tutoring, was "The Boke of Hunting and Hawking, and of Cote Armour," or what is better known as the "Boke of St. Albans." This rare old work was printed in red and black, and its crude type filled twenty-eight pages, upon the last of which was the colophon: "Translatyt and compylt togedyrat Seynt allouns the yere from thincarnacion of oure lord Jhu Crist. M.CCCC.lxxxvi."

This old work has taken its place among the rarest of literary and antiquarian treasures. It has been estimated that probably not more than fifty copies of the original edition were printed, and of these, now after a lapse of four centuries, those which have survived the destructive agencies of fire, damp, the worm and neglect, are extremely rare, and all but one of them almost inaccessible. Imperfect copies are in the Bodleian, Oxford, and the University Library at Cambridge, and a fourth, having been sold for old paper at a penny a pound, afterwards lingering on a kitchen shelf for many years, and passing neglected and unknown through a great many low vicissitudes, finally came into literary hands, and is now exhibited in a glass case in the King's Library of the British Museum. We are glad to learn from the *Antiquarian* that a fac-simile reprint of the "Boke" is now being prepared for publication, which will afford the curious reader an opportunity of studying over the quaint illustrations and the old-time spelling and dialect of the specimen of Fifteenth Century literature.

A part of the book, the charming "Treatise of Fysshynge with an Angle," attributed to Dame Juliana Berners, was reprinted in London in 1827, and in 1875 an American reprint of this edition was edited, with appreciative care, by that well-known and genial angler, Geo. W. Van Sicele, of the New York Bar, and is doubtless now to be found on the library shelves of many readers of the FOREST AND STREAM.

It was half a century or more later that Roger Ascham published his "Toxophilus," a book to archers which the "Fysshynge" is to anglers. It is somewhat curious at this day to read of the worthy "reader to Queen Elizabeth and her secretary for the Latin tongue" as distinguished for his classical attainments and much given to play and cock-fighting. Latin professorship chairs and cockpits is an association altogether too bizarre for the tastes of the present, but it was not so then, and of the two books which Ascham wrote, the "Scholarca" and the "Toxophilus; or, Schole of Shooting," the latter won for him the most distinction, and to it he appears to have owed his church preferment, for he says: "I once wrote a little booke of Shewtyng, which King Henry, her (Queen Elizabeth's) noble father did so well like and allow, that he gave me a living for it."

Less known than either of these two books, but none the less quaint and charming to the deliver in ancient sporting lore, is the treatise "On Englyshe Dogges," by John Caius, published in 1576, and the first book of dogs ever printed in the English language. Conrad Gesner, the preface to the well disposed reader tells us, "a man, while he lived, of uncomparable knowledge, and manifold experience, being never satisfied with the sweete sappe of understanding," requested John Caius, "a profound clarke and raucous denouncer of learning," to write a short treatise of such dogs "as were engendered within the borders of England." To the accomplishment of this task, we are assured, Caius spared no study, withdrew himself from no labor, repined at no pains, forsook no travails, refused no endeavor, pretermitted no opportunity or circumstance; and his friend adds: "The sundry sortes of Englyshe dogges he discovereth so evidently, their natures he ripeth vp so apparently, their manners he openeth so manifestly, their qualities he declareth so skillfully, their proportions he painteth out so perfectly, their colours he describeth so artificially, and knytteth all these in such shortnesse and breuity, that the mouth of th' adversary must needs confesse and giue sentence that commendation ought to bee his rewarde, and praise his deserved pension." This is high praise, and if to our modern ears it sounds bombastic, we must remember that it was written in an age when such hyperbole was much in vogue, and we may well heed the apologetic remarks of the translator: "As for such as shall snare and snatch at the Englyshe abridgement and teare the Translatour, being absent, with the teeth of spitefull enuy, I conclude in breuity there eloquence is but currishe, if I serue in their meat with wrong sawce, ascribe it not to vnskillfulness in coquetry, but to ignorance in their diet."

A copy of this old work is preserved in the British Museum; this Mr. Hugh Dalziel carefully copied, and an edition has been recently published in England, preserving the exact original line for line, and error for error. Looking through its pages we have found so much pleasure in the homely diction, the antique instruction and the charming simplicity of the text, that we have thought it well worthy of a place in our columns, whereby, it may be, we shall help to erect for the author "the monument of immortality" which his translator three hundred years ago bespoke for him.

ANGLERS AND ANGLING.

"FORTUNE," says Machiavella, "likes an ardent wooer and turns the cold shoulder to one who delays." "All is fair in love and war." In angling all is not fair, but activity, early rising, stealthy approaches and delicate casts come under the head of legitimate means of capture. The fish admire determined efforts, and reward them as fortune rewards the ardent wooer, yet let there be no unseemly haste, bustle or anxiety about your movement, but be very quiet and apparently unconcerned, for by those tokens you manifest the instincts of the gentleman, and better, the gentle angler himself.

The most successful anglers are the men who are frequently called slow-coaches, but their slow and careful movements are not incompatible with Machiavella's fortune hunters; the quick, nervous, impetuous men who act before thinking, rarely make good anglers. Their lines are too frequently caught in branches overhead, or their hooks fasten to some submerged snags, accidents which will happen to any one, but the slow-coach has the advantage in his method of extricating himself from the situation. One may perhaps indulge in a variety of sulphurous ejaculations which frighten the fish, while a few ill-timed twitches fasten his tackle more securely, and the natural consequence follows—he loses his hooks as well as his head. Slow-coach, when he gets into trouble, calmly surveys the situation, goes to work the right way, and in a few seconds has conquered the predicament and resumed his fishing, while the other fellow has waded ashore to repair the damage he has sustained.

A queer compound is the angler—a bundle of contradictions! He is the antipodes of himself. He delights in the protection of God's creatures. He is a cruel deceiver, using the finest and most delicate implements in the carefulest manner, unrelenting in the attainment of his object; but he is also kind-hearted, quiet, patient, gentle, with a cheerful word and a helping hand wherever it is deserved and needed. He handles the fish with womanly

tenderness, but their struggles awaken no sympathy. See how skillfully he manages his tackle; not a kink in line or leader, but perfect harmony from reel to stretcher fly; the tip of the rod never for an instant losing the feel of the line, which doubles and turns so gracefully, describing all the curves of beauty and never interfering with itself. How lightly, with perhaps the faintest splash, with "a sound so fine that nothing lies twixt it and silence," does he place his feathery counterfeits on the water, the leader smooth and straight as a newly made candle.

Placing the flies gently and noiselessly as fall the snow flakes, may indicate the acme of fly casting, but if they land like a drop of water, with the softest splash, they will not frighten the fish, and you will catch as many as the angler who preaches snow flakes and thistle-down. One can be more careless while fishing American waters—though carelessness in an angler is always inexcusable—than if he were angling in most of the trout streams of Great Britain. Our trout have not all as yet learned that curiosity sometimes leads to certain death, and it is this ability to capture them so comparatively easy that in many cases makes the American angler the inferior of his English and Irish brethren in all the minutia attendant upon the gentle art. Had we been schooled as carefully as our transatlantic friends, we would not have sometimes to wonder at our ill-luck. Indifference to minutia will counteract many admirable qualities, for the trout is himself an admirable sportsman in certain waters and seasons, and at times attains the highest pinnacle of sagacity.

Our best rod makers turn out work equal, if not superior, in every respect to that of any foreign makers. Our flies are perfect in strength and beauty, and the variety is infinite. Every winged insect, from the creation of the world to the millennium, and perhaps earlier and later, is imitated close enough to deceive even the originals.

Year by year our anglers are improving their methods and implements, as the trout are growing wiser and wiser, until now it requires, on the more frequented streams, the utmost skill and delicacy to capture so wary a general, one so well versed in all the expedients that experience and natural cunning bring to him in his search for the morning and evening meal. There he is a sentient being, cunning as lago and thoroughly up to the "tricks that are vain."

MILLARD.

BAY SNIFE SHOOTING.

II.—LOCALITIES.

"Seek't thou the plashy brink
Of weedy lake, or marge of river wide,
Or where the rocking billows rise and sink
On the clafed ocean side?"

WHO can tell of the habits of our wild fowl and aquatic birds as well as the men who, day in and day out, in cold and heat, and in all kinds of weather, follow shooting for a livelihood? Unfortunately for the public, these men cannot, for the most part, spare the time to dot down their experience. Indeed, but few of them can write, and what if recorded would be of real value to the shooting world, is lost. The educated sportsman is rarely of assistance in this matter, for he, as a general thing, leaves everything to his bayman, and with a profound ignorance as to the habits of the birds, learns little and remembers but little, after a week's shooting, save the number and quality of the fowl brought to bag during his holiday. If he has had good shooting, he is generally liberal to the caterer to his sport; but for the life of him he cannot tell why the stools were set to windward, or why he had better or worse shooting than the guns in the other "rigs." Our experience has taught us that too often the purely scientific man knows even less, and that many works on ornithology abound in absurd inaccuracies, which lead to "confusion worse confounded." True, the scientists tell us the measurements and weight, and the coloring and shading of each bird, but often these descriptions are of the faded plumage of the dead specimen, and not of the live fowl. When colored plates are introduced into their works, they are often so unlike the bird they are intended to represent that if it were not for the name underneath it would be impossible to identify them. In fact, we have seen several which resemble Egyptian hieroglyphics more than birds that have been seen to fly. It is from works of this kind that almost all our sporting book writers draw for their material, and not from real experience; hence errors and traditions are handed down to us, and continued ignorance is the result.

From the Bay of Fundy in the North, to the Florida Reefs in the South, there are miles of the Atlantic coast shielded by long sand bars and shoals, which, at every ebbing tide, abound with every variety of aquatic food. At one time or another throughout the year each snipe is visited for a short or long period by the bay snipe. Leaving the South early in the spring, they seem drawn by some magnetic influence toward the North, passing this vicinity in May, the date being regulated according to an early or late season. Once in their home in the far North, they speedily set about nesting and the rearing of their young. This is soon accomplished, and then their

return flight begins, the old birds preceding, followed by the young several weeks later. But it is a mistaken idea to suppose that all the varieties of bay snipe seek the North to pursue their matrimonial inclinations. Several kinds, and especially the willet and some of the plover, breed to the south of New York. It is during the summer flight that the bay snipe run the gamut of the thousand stands that dot the coast from Maine to Eastern Virginia. We shall not attempt to specify each locality, particularly those that are remote, but simply mention the places that are easy of access and well known to the sportsmen of this vicinity.

Beginning at the north, we follow to the south the line of coast of those States on the Atlantic seaboard, mentioning the names of the counties of each in their geographical order, and the places where more or less shooting can be had at this season. Of course, the shooting begins first at the North, but the rapidity with which the birds make their flight causes the first guns to be echoed along the coast, even to the far South, in quick succession.

LIST OF PLACES WHERE BAY SNIFE ARE SHOT

MAINE—*Washington County*.—The Island of Grand Menan. The island and bars along the entire coast of Hancock, Waldo, Knox, Lincoln, Sagadahock, Cumberland and York counties.

NEW HAMPSHIRE—*Rockingham County*.—Rye Beach and Hampton.

MASSACHUSETTS—*Essex County*.—Plum Island, Ipswich, Cape Ann, Gloucester, Beverly, Marblehead, Salem and Lynn. *Norfolk County*.—Randolph and Cohasset. *Plymouth County*.—Marshfield, Duxbury, Clark's Island, Plymouth and Manomet Point. *Barnstable County*.—Sandwich, Chatham, Quesnet, Wood's Hole, and at almost all the towns along the coast, on Cape Cod and Buzzard's bays, and the ocean side. *Bristol County*.—South Dartmouth and Quansett.

RHODE ISLAND—*Newport County*.—At all the islands, *Washington County*.—Point Judith, Block Island, Bristol, Peacedale and Watch Hill.

LOUISIANA—*St. Louis County*.—Fisher's Island, Plum Island, Ram Island Shoals, Orient Point, Montauk Point, Bridgehampton, Southampton, Shinnecock Bay, Moriches and Great South Bay, and, indeed, all along the south shore.

STATEN ISLAND—*Richmond County*.—Great Salt Kills.

NEW JERSEY—*Monmouth County*.—Manisquan Inlet. *Ocean County*.—Squan Beach, Barnegat Bay and Long Beach. *Burlington County*.—Tuckerton. *Atlantic County*.—Bridgeton Beach, Absecon and Somers Point. *Cape May County*.—Peck's Beach, Townsend Inlet and Leaning Beach.

DELAWARE—*Sussex County*.—Lewes, Rehoboth Bay, Indian River and Long Neck.

MARYLAND—*Worcester County*.—Hammock Point, Berlin and Sinepuxet Beach.

VIRGINIA—*Accomac County*.—Chincoteague Island, Wallop's Beach, Gargathy Inlet, Assawman Island, Matomkin, Cedar Island, Burton's Bay, Trout Channel, Little Matchipongo Inlet, Revel's Island and Matulikin. *Northampton County*.—Hog Island, Sand Shoal, Great Matchipongo Inlet, Cobb's Island and Smith's Island.

THE ANTHRACITE.

AS far as we have been able to learn, the Messrs. Ierreshoff have not yet received any response to their last letter for Major Geo. Deane, Secretary of the Perkins Engine Company, for the first communication of the Secretary can hardly be regarded in a serious light in view of the outspoken blunder therein made. As it has now been clearly pointed out to the agents of the Perkins boiler that the grounds upon which they declined the very fair and reasonable challenge of the Leila are not tenable, but conflict with the simplest truths of engineering science, it becomes all the more their duty to explain to the satisfaction of the public one of two things: either why the Anthracite dared not meet the coil boilers in a test of economy, or else, upon what grounds the remarkable statements of Major Deane are to be justified. It would be snap judgment to assume that no satisfactory explanation will be forthcoming, and consequently we prefer waiting another week to hear from the proper source. We are inclined to think that, in his first answer, Major Deane was acting upon the advice tendered by incompetent and unworthy counsel, and that he was induced to frame his answer in a hurry, whereas, upon second thought, he would not care to indorse statements which he now knows must have raised a smile among the profession. It is hardly to be supposed that a gentleman, representing such large interests as the Perkins Engine Company, should not be acquainted with the commonest of problems an engineer has to meet; nor does it seem likely that one who has shown such wonderful astuteness in obtaining a vast amount of free advertising for an old resurrected apparatus, fully known these last ten years to the profession in America, should really be in total darkness concerning the line of business he represents. For these reasons, we prefer believing that, a stranger in a strange land, the bafeul in

fluence of sundry scheming worthies was really at the bottom of the questionable engineering talent now wrongly credited to Major Deane. All the more reason why an explanation should be forthcoming, unless the Perkins boiler can afford to shoulder the charge of being put forward by persons not competent to judge of its merits.

Should the Perkins Engine Company contemplate establishing a branch of their business in America, they will probably thank us for conning them clear of certain individuals of unsavory reputation, who, unfortunately, appear to have "rung in" with the company's gallant Secretary to the extent of placing the latter's ability in a wrong light before the public. Connection of any sort with confidence men can do the company no good, and the sooner they get a clear conception of the lay of the land, the better.

FISHERY EXHIBITIONS.

THE success which attended the great exhibition at Berlin has set the fashion, and fishery exhibitions are, no doubt, destined to become more or less popular. Germany has had another one, at Wurtzburg, which was not international in its character, although we learn that Messrs. S. Alcock & Co., of Redditch, England, makers of hooks and fishing tackle generally, received a diploma, a gold medal and a "prize of honor" for their exhibit. This firm also received a gold medal at the Berlin Exhibition.

It is now proposed to hold a similar fishery fair in England, this fall, under the management of the Norfolk and Suffolk Fish Acclimatization Society, and Norwich has been selected as the place for it. This one is to be somewhat international in its character, we infer, from the fact that the Fischerei Verein of Germany have signified their intention to "assist," whatever that may mean, but it is certainly too soon after the splendid exhibition in Germany to hold an "international" one; surely a breathing spell of a few years is necessary before the United States would entertain the idea of being officially represented, if it ever does again. The United States Fish Commission not only has much other work to attend to, but there are many other reasons why there are objections to a display by our government, besides the expense, the main one being the damage done to the collection belonging to the National Museum, which will soon be set in position in the new building, many articles in it being impossible to duplicate. Of course such exhibitions are open to private exhibitors, but somehow very few of them had enterprise enough to take advantage of it as the English manufacturers did at Berlin, where almost the entire display in the English department was made by individuals. We imagine that it will be a long time before such a fishery exhibition as the one recently held in Germany will be attempted, for the reason that we do not know of any fishery organization in the world which has the enterprise to conceive and the courage to attempt what was done by the Deutsche Fischerei Verein. The Norwich Exhibition has also the promise of support from Messrs. Buckland and Walpole, Inspectors of Fisheries of Great Britain.

THE TEAM CAPTAIN AND THE CUSTOM HOUSE.—Col. Bodine's lot just now is not a particularly happy one. He made an error in getting his personal effects past the scrutiny of the customs officers, and now every exchange from the country over has its little fling at the leader of the American riflemen in Ireland. It is really to be regretted after such a brilliant run of luck and skill on the field of Dollymount that the record should be snatched by a misunderstanding with such an object as a tide-waiter of the New York Custom House. But such was the fact, and rolls of silk and packages of kid gloves in the Colonel's gun case, without a corresponding notice of their presence on the passenger declaration of the late team captain, makes an annoying contradiction to be rectified. There was manifestly no intention at smuggling, as there was no attempt at concealment. When the team of 1875 came home the display of baggage was somewhat enormous, and particularly excessive as compared with the amount taken out. All of this miscellaneous collection of valuables were then passed by the customs officers without word or question, intending by the act to have a compliment shown the team. Relying on something of the sort again, the Colonel found, when too late, that he had miscalculated, hence the position of affairs to-day. It is unfortunate that any such an occurrence should have taken place, and it is only to meet in some measure the current misapprehension that we speak of it at all.

THE CANADIAN MATCH.—During the present week Creelmoor range has been occupied pretty constantly by the practicing of the Canadian team. The gentlemen who have crossed the border this time have come to win. They are taking time, and proceeding along with a system and care which augurs well for their success. They are woeing the goddess Fortune, as the really successful rifle shot always does, by assiduous court. The men do not lack familiarity each with the other, and

with rifles all of a make, and these, too, American rifles, it will look like a breath of bad luck for them to be beaten. The probabilities of the record are, of course, in favor of the American, or Amateur Rifle team; but the gentlemen of the Amateur Club will not regret a defeat at the hands of their kindly neighbors from across the lake. To-day the team visit Manhattan Beach for a formal dinner, and the match on Saturday will be carefully noted by our special rifle contributor, and the whys and wherefores of victory or defeat duly set forth.

TO COLLECT SEAWEED.—Few objects of natural history are more interesting than the seaweeds and algae of our coasts when properly preserved, and a stroll on almost any beach will reveal to the collector a number of beautiful forms, which are well worthy of the slight trouble involved in their collection and preservation.

Seaweeds are such beautiful objects when fresh, and are so unsightly when shriveled and dried up, that it seems desirable to give full directions to those who may be interested in this department of botany, but who are ignorant as to the best method to be employed to make these objects retain their colors. The present time, too, when so many of our readers are at the seaside, seems peculiarly fitting for the publication of such directions. We publish elsewhere very full directions for collecting algae, which we owe to the courtesy of Prof. Daniel C. Eaton, Professor of Botany in Yale College. Prof. Eaton is one of the first authorities in the country on seaweeds, and we desire to express here our appreciation of his kindness.



GREENE SMITH.

FEW men were better known to the sportsmen of America than was Greene Smith, a brief notice of whose death on the 23d ult. was given in our columns a fortnight ago. To-day we publish the accompanying portrait, which we have spared no pains to make faithful to the photograph from which it was engraved. Those who knew the original will at once recognize its fidelity.

Greene Smith was born in Peterboro, N. Y., in the year 1842, and was therefore at the time of his death just in the prime of life. He was a son of the late Gerrit Smith, and was given a superior education.

At an early age he manifested the taste for natural history pursuits, the gratification of which, in later years, was his chief employment and pleasure. In his younger days, too, he exhibited those qualities of character which made him so remarkably a friend of every one with whom he was associated. Greene Smith had a strong social disposition, and his affability drew friends about him at home and abroad. He enjoyed traveling, and spent much of his time away from home; but, as has been happily said of him, "he never got far enough away to find any enemy."

Although coming of a family somewhat prominent in public life, and naturally possessed of those qualifications which might have given him like prominence, his inclination led him elsewhere, and his life was passed mainly on the family estate, and without much that was noteworthy. He was at one time professor of ornithology in Cornell University, but his interests always centered closely in his wonderful collection of birds, to the perfection of which his time and enthusiasm were devoted.

Among the sportsmen of this State Greene Smith always held a prominent and a very pleasant position. He was the president of the National Sportsmen's Association, of Niagara Falls, in 1875, and in 1877 presided over the Convention of the New York State Sportsmen's Association for the Protection of Fish and Game.

For many months preceding his death it had been evident to his friends that recovery from his pulmonary complaint was impossible, and for several weeks he had been perceptibly failing.

These last weeks were spent in the "Ornithon," or bird-house, among the treasures he had been so long gathering together. Here, propped up in his sick bed and surrounded by all that love and wealth could supply for his comfort, he sought relief from pain by applying himself to a final cataloguing and arranging of his ornithological collection; and it was here that he passed away from earth.

The following description of the "Ornithon" was published in this journal (ROD AND GUN):—

After walking some two or three hundred yards down a gravel walk, we came to a large building in Gothic rustic style, the sides covered with henlock bark. On the rustic door is the word "Ornithon" in ivy. The building is in the form of the letter T, the main part being one and a half stories high and 56x30 feet; the L is one story, and 25x40 feet on the ground. The entrance is in the center of the L portion of the building. In the center of this room, immediately in front of the door, is a large double desk, surmounted by statuettes, and containing writing materials, with inkstands and study appliances, all rich, and in modern taste. On the timbers over the desk are carved an immense pair of elk antlers, from which depended Sharps and Spencer rifles, with game bags, riding whip, powder flasks, horns, rod, creel, and other sporting implements; also a riding whip which Mr. Smith said once belonged to a soldier in Stuart's cavalry. The sides of the room are hidden by immense glass cases, the one on the right containing specimens of skins, duck, teal, snipe and other game birds; also a large variety of song birds, herons, swans, etc., in a fine state of preservation. Behind this case is a gun-rack fitted with drawers, containing ammunition, rods, wads, slugs and shooting fixings. The case on the other side of the room is of the same size, and contains some of the finest mounted specimens we had seen. Among them were the English woodcock, European kingfisher, cuckoo, a whooping crane (of which there are very few specimens in this country), a pair of black swans from Australia, a roseate spoonbill, monster owls, hawks, pigeons and other birds, with sundry foxes and quadrupeds, many rare shells and curiosities of various kinds. Behind this case is a well-filled book-case, containing a good collection of modern literature, in which are the best books and many rare works in sporting and natural history.

The entrance to the main building is about fifteen or twenty feet wide, and in the center stands a beautiful fountain of cool water, with a few speckled beauties sporting in the crystal flood. A grand wide stairway leads to the upper part of the main building, and on either side are large rustic rooms inclosed with wire screens. The room on the right had a rocky bed, with a stream of water flowing through, and was exclusively for song birds, and would accommodate upward of a hundred without crowding their movement. On the left, in the main room, is a miniature pond, with rock work arranged especially for ducks and other aquatic birds. Beyond this is a large wire room used as a kennel.

We turn to the right, and there find a loading table for guns and ammunition, and in a cosy nook, neatly arranged, are ground and plunge traps, and all the paraphernalia for trap shooting, according to the most improved plans of English and American rules. On the left side of this loft or large balcony we find the professional tools of scientific draughtsman and civil engineer, all laid out in order, meant for use, not show, but a rich man's, nevertheless, love for their use being shown by the perfection and finish of the tools.

In another case are the appliances for taxidermy. A second collection of books is found in this department in keeping with this subject; and here we found Wilson's Ornithology, 9 vols., of 1895; Charles Lucien Bonaparte's work of 1895, in 4 vols.; Audubon's complete works of 1856; also John Cassin's Appendix: The birds of North America, by Spencer F. Baird, John Cassin and George N. Lawrence, of 1890; Baird, Brewer and Ridgway's N. A. Birds, of 1874, and all works of the best authors complete, not forgetting flies of *American Sportsman* and *ROD AND GUN*.

The walls throughout the building are covered with engravings and specimens, mostly fine illustrations of birds and sporting scenes, together with trophies of the chase, specimens of horns and other matter. Among the specimens are the spikes of ibex, hartbeest bleesbok, eland, gnu, springbok of Africa, the gazelle and chamois of Switzerland, antelope and buffalo from the plains. Bird cages without number, containing song birds, hang from the timbers. Also a variety of trout and salmon rods, with flies attached, ready for a cast. Trailing arbutus, clematis, wisteria and other creepers cover the walls, draping all unoccupied spaces.

CELEBRATED SHOTS.—Dr. and Mrs. John Ruth, the celebrated California experts with rifle, shot gun and pistol, are now in this city, and it is to be hoped will before long give a joint exhibition of their skill with the arms that they so well know how to handle.

Dr. Ruth we find well acquainted with our old friend Major Frank North, himself one of the best rifle and pistol shots that we have ever seen, whose name is so well known west of the Missouri River as Commander of the Invincible Battalion of Pawnee Scouts. Major North's letter, recommending the Doctor to the public as one of the finest shots in the world, is a document to be proud of.

Dr. Ruth has just received from William G. & Sons, of Boston, one of Scott's hammerless guns, of latest model, and will use it in all his exhibitions and matches.

—The Virginia mountain trip, of which we have already made extended and commendatory notice, will begin Sept. 9th, and not, as it was at first proposed, Sept. 1st. We have reason to believe that those who join the expedition will find it a rarely enjoyable mode of pleasure travel.

The Sportsman Tourist.

A MORAL TALE FOR POACHERS.

IT was in the days before there were any laws in our State for the protection of fish and game, or any State Association for the protection of fish and game, or a Sham Lake Plain ditto, ditto, ditto, ditto, with capital letters and capital dinners and—what else? Any one could shoot, trap, net and snare from one end of the year to the other without fear of man or act of legislature, and no fish, bird nor beast that swam, flew or ran wild, had any friends but the few sportsmen and anglers who preached and practiced and were a law unto themselves. In those happy times there were two marked fishermen named Andre and Joe, who, in the exercise of their rights as free and newly naturalized citizens of the United States, saw fit to hedge Wonakakauk with a fyke, and so prevent, to their own great profit, the passage up stream of all fish that sought to go thither in quest of food or spawning grounds. No one up stream could get a fish. Anglers in the upper waters sat like Patience on a monument, only serving more than smiling, at grief—and went down, with not a bite to brag of but those of mosquitos, wickedly cursing these honest fishermen, who had only taken what belonged to them—for were not all the fishes of our waters created especially for Canucks to catch and sell? But some were naughty enough to rebel against this heavenly decree, and took up the net of Andre and Joe, who then prepared to defend their rights. Andre loaded his Quebec rifle with a deadly charge of BL, and swore a dourly unrelenting oath in bad French and worse English "dat if he ketch any Yankee round hees net, he'd stang it worse as a nes' of bumbly-bee!" and when he and his companion had set their net at twilight, they tied their scow to the head stake of the fyke and sat snoking and gibbering, alert for the foe.

But even the tongue of a Canuck will tire in time, and his powers of action will not endure forever—yet he never dies; but, when his appointed time has come, goes to Colchester Point and begins eternity—and as the night grew thick, Andre and Joe lapsed into silence and knocked the ashes from their pipes, and for a change of position stretched themselves on the thwarts of their craft. The bull-dogs bellowed in monotonous concert, the whippoorwill's note steadily lashed the heavy air, and the rilles chuckled continuously under the broad bow of the scow; such sleepy sounds with such infrequent breaks of splashing and of diving muskrat that the watchers soon became sleepers.

Then the spoilers came—Sed and Jack—in a light trapping skiff, paddling as silently as the ghostly canoes of Disraeli Swamp. As they came alongside the scow, Sed, with his jack-knife, cut the thong that held her to the stake, and she with her unconscious crew went slowly drifting with the south wind toward the lake. Andre was a first-class sportsman, and a belated fisherman who met them, took the craft for a tug making her way out of the creek, yet wondered greatly that she made so little headway and showed no light, and at last concluded that it was some new invention of Capt. Barnum and his cousin Hen, and that the illustrious inventors were making a trial trip by night preparatory to astonishing the world. An hour later she grounded among the willows of the bay, and, having had her warlike crew, leaving had their way out, Andre and Joe found themselves knew not where, till the growing day outlined the familiar horizon and silenced the marsh-bordered reaches of the Wonakakauk, and they saw the trees of Garden Island looming darkly out of the misty bosom of the bay of the Vessels and glimmering beyond the star of Split Rock light-house. Then, some say, the curses of the "Bostonals" flew so thick and hot that they blasted the largest tree in the forest of the bay, and it is quite as likely that, in the frenzy of his rage, Andre "played" the tree was a Yankee, and riddled its body with his BB's.

Hours before this their net had reluctantly sputtered into ashes on top of a blazing brush heap.

AWAKE, SPORE.

ROUGH NOTES FROM THE WOODS.

MOOSE RIVER, July 21st.

SHE'S light. My fancy painted her, she's lovely, she is light. She waltzes on the waves by day, and rests with me at night. But I had nothing to do with her painting. The man who built her did that. And I commence with the canoe, because that is about the first thing you need on entering the Northern Wilderness. From the Forge House, foot of the Fulton Chain, on the west, to Paul Smith's Lower St. Regis Lake, on the east, is ninety-two miles. About five miles of this distance is covered by carries; the longest carry on this route is about one mile; the shortest, a few rods. If you hire a guide he will furnish a boat and carry it himself. His boat will weigh from sixty to one hundred pounds, and will carry two heavy men, with all the dunnage you need. He will "take care" of you, as they express it here, and will work faithfully to forward your desires, whether you be artist, tourist, angler or hunter. His charges are \$2.50 per day, and found. The tired, overworked man of business, who gets away from the hot, dusty city for a few days or weeks, cannot do better than come to this land of lake, river and mountain, and hire a guide.

What the mule or mustang is to the plainsman, the boat or canoe is to the guide, hunter or tourist, who proposes a sojourn in the Adirondacks. And this is why I propose to mention at some length this matter of canoeing and boating. Being a light weight and a good canoe man, having the summer before me, designing to haunt the nameless lakes and streams not down on the maps, and not caring to hire a guide, it stands to reason that my canoe should be of the lightest, and she is. Perhaps she is the lightest cedar-built canoe in the United States, or anywhere else. Her stems and keel are oak, her ribs red elm, her gunwale spruce, and six pairs of strips, three-sixteenths of an inch thick, with copper fastenings from stem to stern, leave her weight, when sandpapered ready for the paint, fifteen pounds nine and a half ounces. The paint adds about two pounds. She is ten feet long, twenty-six inch beam, with eight inches rise at center, and, propelled by a light double paddle, with a one foot power in the middle, gets over the water like a scared loon. I propose to take her a rather extended trip be-

fore snow flies, if she does not drown me. I reckon her carrying capacity, in ordinary weather, at 150 pounds. If she proves reasonably safe on the larger lakes of the wilderness, she is an achievement in the boat-building line. She was built by J. H. Rushton, of Canton, N. Y., and is, by several pounds the lightest canoe ever made here. I will only add that she is too light and frail. I would recommend ten and a half feet in length, with thirty inch beam, and ribs two inches apart instead of three. Such a canoe would be stanch and safe for one, and need not weigh more than twenty-two pounds. She can easily be carried on the head, in an inverted position, first placing a blanket or old coat over the head by way of cushion.

When I reached here, just one week ago, I had a twelve mile ride on the corner of a trunk, while I lugged that frail boat like a faithful lover, I only meant to stop until I could get my traps carried through to the Fulton Chain, which, in the case of the canoe, was not so easy. I was in no hurry—the hotel here is neat, well kept and prices very reasonable. While waiting for the man to turn up who was to carry the little craft on his head to the Forge House, it dawned on me that I was well enough here I was for a few days. Parties were constantly coming and going, and all stop at Moose River, which is the half-way house between Booneville and the lakes.

For interviewing guides and taking notes of the region to the eastward, there could be no better point than this; and I needed practice with the canoe before taking her over the larger lakes. Moreover, I came here for a superior quality of water, air and angling, with a little hunting thrown in at the proper season.

What if these things were at my hand, right here, and parties hurrying through post haste to the Brown Tract or the Raquette waters were running away from that they sought? Those coming out of the woods do not, as a rule, claim notable success with the trout. Many of them would eat pork before they broiled trout, and it is not for the guides, and one of the latter told me that "trout" was poor on and around Big Moose, while he thought Little Moose and Panther lakes not worth a visit. "I could catch all the trout I wanted right around here," he added.

So I overhauled my fishing gear and went in for brook trout, and, as I supposed, found all I wanted; found that I could, by angling just enough for recreation, catch more speckled trout by far than I need, while there is very pretty fly-fishing at the spring holes in the river. Many gentlemen who go far into the wilderness, at much expense of guides, etc., would be well content with just such fishing as I am enjoying at Moose River. Then there are, within an easy walk of the hotel, several small lakes where deer "water" nightly, and may be "flushed" for water in the spring woods.

But this is not camping out—not a genuine woods life. We seek the forest for adventure, and a free, open air, hunter's life, for a time at least. Well, it may be a little time, but it is very pleasant and healthful, all the same. As for camping for the benefit of open air, bright fires and beds of browne, fresh picked from hemlock and balsam, we have that right here. Just under my eyes is a little stream, the island in the river, some twelve rods long by six wide. It is well timbered with spruce, balsam, hemlock, cedar, pine, birch and maple. It is one of the pleasant spots that nature makes and man neglects. The island lies high, with roaring, rushing rapids on the left, and a broad rock dam on the right, which at low water becomes a cool, clean promenade, 100 feet long by forty feet broad. Near the center of this rock is a natural depression, forming a basin into which the water lovingly filters to the river. In this little dock I let the canoe rest at night; against the largest spruce on the island my light tent of oil factory is erected, and there I rest o' nights—for a few days only, and then for broader waters and deeper woods; perhaps to go further and fare worse. NESSUCK.

LONG POINT.

"THE HAPPY HUNTING GROUND."

BY kind invitation of my good friend, Sheriff Woodruff, and with but a few minutes to catch the train, I hastily bundled what few things were necessary into a bag and started to my new home. In this little dock I let the canoe rest at night; against the largest spruce on the island my light tent of oil factory is erected, and there I rest o' nights—for a few days only, and then for broader waters and deeper woods; perhaps to go further and fare worse. NESSUCK.

We arrived at about 7 in the evening of the 21st of May, after a pleasant trip on the lumber boat from Port Dover. Approaching the dock we were greeted with handkerchief salutations from friends on shore, conspicuously among whom was that dear old veteran Christian sportsman, Dr. Edgerton Ryerson, whose hale and hearty figure at seventy-seven shows how careful living and abundant exercise, mentally and physically, do to keep age young.

This charming island is situated on the east end of Lake Erie, and contains an area of about 20,000 acres of land, a large portion of which is marsh, and which affords fine feeding and nesting-ground for all the varieties of ducks which breed in this neighborhood, such as mallard, teal and woodcock. Fish of all descriptions abound. The woodland is largely supplied with deer, wild turkeys, partridges, woodcock and snipe. Endless numbers of muskrats, when seasons are propitious for breeding and catching, yield quite a revenue to the company, trapping as they do from 10,000 to 25,000 annually, which tends in some degree to lessen the expense of supporting the four or five gamekeepers. The time of these keepers is spent in watching and protecting the grounds from the inroads of poachers. The caretakers consist of William Leary, steward; Helmer, head gamekeeper, and Jackson, second gamekeeper, all of whom live upon the main island. Morris, Fitzmorris, "Mory," by the way, is a hunter, and takes charge of the fifteen or sixteen cottages, which belong to individual members of the club, or are used by punters engaged during the shooting season. In addition to these is a club house, in which is the dining-room, a large apartment, finished in oiled chestnut and decorated with stuffed animals, maps and paintings, with an autograph register or tablet of celebrities who from time to time have been guests of

the club. These buildings are all constructed upon piles, forming a wharf, and distant about two and a half miles from the island proper, and upon a spot known as the "Carrying Place Creek." This is a most beautiful place for a summer resort, free at all times from dust, smoke and noise, with generally a refreshing breeze, and a most things pleasant. Each cottage has its cooling room—a sort of "corn crib"—in which each night the birds shot during the day are hung up, and a refrigerator contributes to the many creature comforts that are to be found here. There are a good many celebrities connected with this place, and some few whom I met who have shot in the marsh and hunted the upland game from sixty to seventy years. Among these Dr. Ryerson, whose name is one of the oldest, has spent some months here with his good wife this spring in his jolly little hunting box, where in his quiet ease, he told me, much of his admirable book on Canada has been written. Then there are the Messrs. Woodruff, of St. Catharines, and others whose names at present do not suggest themselves. Yes, old Peter Price, nearly ninety years old, still trolls about, and his son, Bill Price, is well known as "geranium" and Bill Woodward, too; and last, but not least, comes the worthy Ayres, who has made the marsh "hum" over and over again with old Westly-Richards, and tells every time she goes off a tale of woe to anything that comes within his reach. There is a little history attached to all connected with the association.

Our fishing party, which consisted of Sheriff Woodruff, Mr. Lucas, Mr. McKenzie and myself, upon our arrival, were coupled off together in cottages, each with two bedrooms and a sitting-room, furnished with everything to conduce to the comfort and ease of the wearied hunter after a hard day's sport. Now, this party was essentially a pleasure-bent organization, seeking rest and relaxation from the toils and cares of business, from over-worked brains, etc. Our time was chiefly spent in hooking five-pound green bass. The fish were much abundant, and had the water been more clear we should no doubt have doubled the catch, which, I believe, would average one every three minutes, and, in fact, with two hooks, as many as sixty or seventy an hour were taken. Of course the more scientific disciples of "Isaac," with delicate tackle, such as friend Harris used, could not land as quickly as when "yanked out" with a stiff rod and a stout green bass. 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woods (sacred to the memory of Pious "Jeems"), passing through its entire length and then rounding and returning south to the Mt. Misery plantation. As soon as I heard the backward move I halted to see fox and hounds and to mark positions. In a moment all were upon me. The mushed dogs, with tongues hanging out and tails dropped, were in earnest and doing their work like trained fellows, but sorrowfully. The fox seemed perfectly fresh, and at a bound moved off, closely pursued by one of the hounds that had been left behind by the pack when it emerged from under the river hills, turning right back into the pursuing pack. Up to this point things looked discouraging to her, and were so, but a temporary break followed by a minute's confusion proved a fortunate respite and gave her time to widen the distance between her and her pursuers. She made judicious use of it, and down the Roanoke she skirted, keeping close under the hills and in paths that skirted the low grounds until reaching the Roanoke Mills, some three miles from the break. She here turned due north out from the river a mile and kept up east until parallel with Eaton Ferry road, for a while.

A few hundred yards above the "scratch field"—a field sacred to the memory of Cols. Edmonds and Putney—she crossed the road, returning to the Roanoke. Here I headed the pack and had a fair opportunity to enjoy the sport and note positions of each dog. Plunder, a full brother of Brodnax's Ledrew, was in the lead, with little Mischief well contesting his position. The mush had gone, and the whole pack looked drawn for the race. And so they moved. As they passed me, with every individual dog in his place, I was enthused with the scene, put spurs to my horse, and dashed through the woods, not with no feeling of the larger about me. I had not gone over half a mile when I was abruptly thrown against a tree, backwards from my horse, momentarily stunned, with the blood flowing from my forehead and nose and unable at first to get up. There I remained until the sweet music of my hounds had faded away in the distance and I had sufficiently recovered to move my limbs to ascertain if they were broken. Finding all sound, I quickly got up and remounted my horse, and all the while secretly and sympathetically lay, awaiting my pleasure, and cantered home, anticipating something serious after the excitement of the chase had passed off. The hunt was completely taken out of me, and it was no longer fun to see or hear the hounds. When I arrived at home I had my wounds carefully examined and cared for. There was a cut in the forehead, one on the nose, and the entire right side bruised. But I am again on my feet and ready when the season advances to try it again.

The result of the chase I cannot give. If there was no interruption of it, the fox soon was either put to earth or killed. It was impossible for him to stand up and escape under the press. Apart from this the pack soon returned home, and pretty much together. Logan was in the advance, and Logan "never surrenders."

How my collision against the tree occurred, may be a matter of interest to all huntsmen. My horse is a thoroughbred—very intelligent, easy and quiet in the class, and perfectly under control of the rein. So he may be pronounced a perfect "hunter," more especially when you add that he is a fine leaper and no blunderer. In riding through woods I usually look some distance in advance, marking the line of my motion. I did so on this occasion. But the woods being very open and free from shrubs, I did not use my customary discretion, and permitted my horse to have his own way up to within a few yards of the tree. I discerned if he went to its right the space between it and another was too small to allow safe passage, I consequently attempted to pull him to its left, and succeeded; but it brought the half of my body and face against the tree, and with a horrible crush of my whole frame. The feeling cannot be described. If I had been a heavy man the result might not have been so favorable. I weigh only 112 pounds in full dress, and the speed of my horse could not have added enough to my momentum to render such a condition fatal. At all events I am still myself.

T. G. T.

Natural History.

—Address all communications to "Forest and Stream Publishing Company, New York."

A CAPTIVE WOODCOCK.

A CAGED woodcock, now to be seen in this city, is attracting much attention. The bird, which is apparently a male, was captured July 28th by the proprietors of an auction store on Sixth Avenue, into which it had flown, and was afterwards transferred to the hands of Mr. J. Morris, of Jefferson Market, where it is now to be seen. Its present owner, who was formerly a dealer in game, and has a very clear idea of the requirements of a woodcock, has fitted up for his pet a very comfortable prison. This, which is an ordinary canary's breeding cage, is covered on the floor with dry moss, except at one end, where there is a box of mud three inches deep, ten wide and eight long. The bird is fed wholly on earth worms, of which he eats each day a great number. They are buried in the box of mud by Mr. Morris, who has great difficulty in keeping the bird away from that end of the cage until the food is covered up. When his master introduces his hand into the cage the bird manifests great excitement, and declines to give up his place on the mud, so that he has to be pushed away to the other end of his quarters. As soon as he is permitted he returns to the box of mud and commenced to bore with the utmost vigor.

Stalking over the damp earth with much deliberation, he introduces the extremity of the bill into the mud at an angle of about 80°, and by a series of slow pushes, buries it to the base. While doing this his left foot is advanced and his body slightly inclined downward. When his bill is fairly buried the woodcock stands perfectly still. He

looks as if he were listening, and many of those who have seen him believe that this is what he is doing, but we think that there is no doubt that he waits to feel if there is any movement in the mud. The point of the bill of woodcock, snipe and some other waders, are extremely sensitive, and they can no doubt detect any movement in the soft earth in which the bill is plunged. If the bird then feels no movement he withdraws his bill and repeats the same performance at a little distance. If a worm is felt, however, or the motion which indicates that one is near, he partly withdraws the bill, and changing its direction slightly, plunges it in again, and withdraws the luckless worm, which he then devours, apparently with great satisfaction. This proceeding is repeated until all the worms supplied have been extracted from the mud. He then with great deliberation cleanses his bill by means of his feet, ruffles up all his feathers and gives himself a shake or two, and then retiring to the dry moss at the other end of his cage, buries his long bill among his scapular feathers and prepares for a nap. Slowly his bright brown eyes close, and at last he drops off, to dream, no doubt, of the swamp where he was born, and where he passed his early days.

One of the most remarkable things about the bird was the rapid way in which he sucked in the longest worms. His upper and lower mandibles came together very rapidly, and almost before the worm was fairly drawn from his hole he disappeared down the woodcock's throat.

We understand that Mr. Morris is having a larger cage built for Dick, as he calls him, and we hope that in his more ample quarters the latter may live long and happily.

DIRECTIONS FOR COLLECTING ALGÆ.

BY DANIEL C. EATON, PROFESSOR OF BOTANY IN YALE COLLEGE.

THE following notes are printed for the use of those persons in any part of the American Continent who are willing to help the cause of natural history by making collections of seaweeds and sea-mosses, but are yet uninitiated as to the modes of collecting and preparing their specimens.

WHERE, WHEN AND HOW TO COLLECT.

After a heavy gale blowing on the coast, almost any beach of sea, gulf, or bay, will be covered with algae, often in great quantities, coarse and fine, black, red and green, in entangled masses. Such heaps should be carefully examined as soon as possible after their formation, or else the more delicate kinds will be quickly destroyed by decay.

At extreme low water the sea will leave tide pools among rocks, or sometimes in the sand, and by wading in these pools many sorts may be obtained. The rock-pools with clear water and some shade from the rocks will generally yield the finest specimens. Old buoys, piles, wrecks, etc., afford good nesting places for seaweeds. In quiet weather a small dredge worked from a boat, in water from one to fifteen fathoms deep, will often bring up varieties not to be obtained in any other way. A strong fishing line with coarse hooks will bring them up from the bottom also. A seine left a day or two in the sea, as a pound-net for instance, will catch many algae which were floating in the water.

The collector ought always to have a light hand-net—a bag of mosquito netting stretched on a brass hoop of 8-10 inches diameter, and secured to a good six-foot staff, is very convenient—a light basket containing several quart or pint preserving jars, a few smaller wide-mouth jars, and perhaps a pair of brass forceps and pocket magnifier.

The coarser sorts may be put in the basket, and the finer ones in the jars, keeping the latter filled with clean water. It is better to keep specimens clean when first obtained, so that the collection taken home may be in good order. Very rare or delicate specimens should be put separately into the smaller bottles. Care should be taken to get the whole plant if not too large, and if it be very large, to cut out for preservation the root or "holdfast," and portions of the stem and other parts of the plant.

The most careful collector will note also the kind of place where the plant was obtained, whether on rocks, piles, floating, or growing on coarser varieties.

OF PRESERVING THE COARSER SORTS.

These should be shaken a little, loosened or spread out a little, but never washed in fresh water, and then dried in the air. The best way is to stretch a cord in some windy, and if convenient, shady place, and to hang the specimens on the cord. The flat-leaved forms, however, dry to best advantage if spread out on coarse paper and laid on a board. They should be protected from the dew at night, or brought under cover. In this way a day or two will dry almost any sea-weeds, and, as the salt remains in them, they will keep for years, and may be easily soaked out and mounted on paper at any time. This rough-dried collection should be packed in boxes, and if the specimens pack too closely, twigs may be placed among them; if not closely enough, a slight sprinkling will make them so pliable as to pack nicely. Such seaweeds, however unsightly they may be in this condition, may eventually be made into excellent specimens. Corallines and other stony algae may be wrapped up in paper, and will keep so indefinitely.

OF MOUNTING THE MORE DELICATE SORTS ON PAPER.

Dr. Harvey has so well described this process, that the following description of it is taken from one of his works on algae. "The collector should have at hand a couple of large flat white dishes, filled with [fresh] water, in one of which the specimens may be washed, pruned and freed from parasites, and singly introduced into the other when sufficiently clean. When the specimen is floated in the second dish, a piece of white paper of proportionate size is to be introduced under it, the branches finely displayed with a pointed instrument, a porcupine's quill or a small forceps, and the superfluous parts removed. The paper, with the specimen so displayed upon it, is then to

be carefully withdrawn from the water, placed between two sheets of soft paper, and subjected to pressure like other plants. Thin calico (white muslin) rags are useful to lay immediately over the specimens, between them and the soaked paper, as the cloth is less likely to adhere to their surface than paper, and if it does adhere, is more readily removed without injury. After the first six hours, and again once every day till the specimens are fully dry, the wet paper must be changed, and then it will be found, in most cases, that the specimen has adhered to the white paper on which it was displayed. The smaller kinds will be sufficiently dry in forty-eight hours. A very little practice will make the process easy, and the trouble will be repaid by the beauty and interest of the collections which may soon be formed." To the above it may be added that the finer red varieties will improve in color for several hours' steeping in fresh water, but many of the most delicate must be mounted from salt water only, else the color, and sometimes even the structure of the plant, will be destroyed. The best, as well as the cheapest kind of press is two good pine boards, about twelve by eighteen inches, and half a dozen bricks separately tied up in wrapping paper. Two great pressure leaves a print of the cloth on the specimen, and renders it also more difficult to revive a fragment for microscopic examination.

For ladies' albums algae are often mounted on fine Bristol board or large wedding cards, and some very beautiful specimens are pressed between layers of white flannel—half cotton is best—without the use of either muslin rags or soaking paper.

A solution of one part crystallized carbolic acid, ten pure glycerine, and forty parts of water, will preserve algae a long time, and such specimens are even better for study with the microscope than the specimens on paper.

It remains only to add that the writer of these notes will receive with thanks any collection, large or small, from all parts of the world, and will endeavor to name all American specimens sent to him.

New Haven, Conn.

A RAT WITH A COLLAR.—Many of our readers will remember that some years ago we published an account of a deer with a bracelet, and gave a wood cut showing the manner in which the unlucky animal "had put his foot in it." The bracelet in this case was a hard ring of wood, the outer portion of a pine knot, and it appeared that the deer while small had stepped into it, and had never been able to free its foot from the incumbrance.

A somewhat similar incident is noticed by the Washington National Republican, as follows:—

Mr. J. Enthoffer, an employé of the United States Coast Survey, residing at No. 68 I street Northwest, has contributed a curiosity to the Smithsonian Institution, which, if it adds nothing to scientific knowledge, will be regarded with much interest by all persons interested in the habits, adventures, and misadventures of rats. Mrs. Enthoffer had been annoyed for some time by a persistent rat. She occasionally caught a glimpse of his rashness, and was surprised to see that he wore what appeared to be a yellow collar. This fact gave rise to much speculation in the family as to how the rat came into possession of the collar. The mystery was solved a few days ago, when the rat wearing the collar was caught in a trap. Unfortunately the rat was killed by a dog, but upon examining the body it was found that the collar was a ring of bone, fitting tightly about the animal's neck. The theory is that the rat when it was small had found a bone, and gnawing out the center, pushed his head through and was unable to extricate himself. As he grew larger the ring of bone tightened about his neck, and he wore it until death as a badge of his enterprise in the search for food.

A TAME RUFFED GROUSE.—Not long since we published an account of a ruffed grouse in Massachusetts, which was so tame that it would come at its master's call and eat from his hand. Subsequently we received brief accounts of other tame grouse, but most of them lacked definiteness, and were hence of little value. From the Dansville (N. Y.) Advertiser we take the following note, which is, if true, very interesting. We give the item in full:—

Charley Sedgwick tells us of a tame partridge which he has seen and handled, the like of which we have never before heard. While in Mt. Morris last week Mr. Sedgwick heard about this bird, and was very too glad to accept an invitation of Capt. McCarthy to visit it. It is found on Mr. Sweet's farm below Mt. Morris, about a mile, and lives alone in a brush pile near some farm buildings. To induce this bird to emerge from its hiding place, all that is necessary is to pound on the building, when it will cautiously come forth, and after a short time permit you to pick it up and handle it. You can toss it into the air and it will fly in a circle about you and finally alight at your feet. It seems that some workmen have discovered the bird while eating their dinners near its cover. When first seen it was not yet full-grown, and apparently "alone in the world." The workmen by feeding it day after day gradually overcame its extreme shyness and brought it to its present state of tameness. It is attracting much attention.

TEMPERATURE OF FRESH WATER LAKES.—Some interesting results have recently been published in the Archives des Sciences by a paper bearing on the temperature of certain fresh water lakes.

From experiments conducted at Lake Lemán, it appears that the hundred meters nearest the surface absorb the heat very rapidly, but it penetrates the lower depths much more slowly. At a depth of 335 meters there was considerable variability in temperature, and it was evident that the point where variation ceases was far below this depth. The investigator considers that by January 15th, 1880, Lake Lemán had expended all the heat stored up in its waters during the previous summer.

ENLIGHTENED LIBERALITY.—The sum of 50,000 francs has been appropriated by the French Government to assist Mr. Pasteur in carrying out his investigation on the contagious diseases of animals.

Fish Culture.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE INTERNATIONAL FISHERY EXHIBITION IN BERLIN.

RUSSIA, ENGLAND AND AMERICA.*

[From Vol. III, No. 27, of the "Deutsche Fischerei-Zeitung," Stettin, June 14th, 1880.]

RUSSIA'S exhibit in the Berlin Fishery Exposition of 1880 is by no means proportionate to the vast extent of her system of watercourses, to the products of her enormous rivers and her colossal lakes. These water-courses have rendered the steppes habitable and have made them fertile by their moist atmosphere drawing immigrants to their shores. The wealth of fish called into existence a sort of primitive bartering trade extending far inland; the nomads became farmers and fishermen, and in the course of centuries large cities sprung up along the banks of the rivers, whose existence is in part at least based on fishery. The Volga, the Don, the Dnieper, the Oka, contain nearly all our well-known species of fish, but especially an enormous supply of sturgeon, which in spite of persecutions yield a rich fish harvest year after year. Of all this, and especially of the immense economical importance of the Russian fisheries, the exhibit gives a very faint idea, although it is interesting in itself. Caviar is, of course, represented by a large number of samples; there are dried fish, various articles made of fish skins and fish bladders, different kinds of fish oil and a number of fish in spirits of wine. Pisciculture seems of late years to attract more attention, for we find in the exposition specimens of Coregoni, salmon and sturgeon raised by the authorities and by private individuals. Mr. Constantine Muszynski, proprietor of the Metele estate in Poland, has sent a very interesting collection of fish, of which we shall give a description in a future number.

What has been said of Russia applies also to England. The English fisheries, especially the salt water fisheries, are very extensive, but the exhibit does not do them justice. What is there is very beautiful, elegant and practical, but relates almost exclusively to hook and line fishing. There are also on exhibition, nets, models of boats and very fine representations of fish in wood and plaster of Paris, but the main portion of the English exhibit is devoted to fly-fishing, etc. The handsome cases are filled with hooks, lines, etc., and the celebrated Redditch manufactures of S. Alcock & Co. and Bartlett & Sons are well represented. It is well known how passionately fond Englishmen are of salmon fishing. During summer large numbers of them may be found in Scotland, Ireland, Sweden and Norway, often living in very primitive huts and paying large sums for their fishing privileges, in order to give to the fish which they have caught. This, in their opinion, is true sport; the fish in itself is no object; they only seek the excitement connected with fishing. The relief representations of salmonoids and their inner structure are very fine; and of special interest is a representation of two equally large pike, one of which has half swallowed the other.

The American exhibit is very extensive and varied; broad and comprehensive views have evidently guided its arrangement; nothing has been left to the whim and fancy of individuals, and the result is therefore a very complete and admirably arranged exhibit, which could not possibly be more instructive. The arrangement has been in the hands of the United States Commission of Fish and Fisheries, which has displayed great energy and knowledge of the subject. At the head of this commission is Prof. Spencer F. Baird, the most prominent scientific and practical ichthyologist in America. His picture hangs in the exhibit, which occupies a large portion of the first story.

The collection of American aquatic animals, stuffed, is very extensive, giving a good idea of the great variety of forms. At the end of the broad and beautiful marble staircase an enormous sea lion from Alaska shows his powerful teeth, while the surrounding seals only make him appear all the larger. This group is part of the very interesting and well-arranged natural science establishment of Prof. Henry A. Ward, of Rochester, N. Y., which has been in existence for about twenty years, and which annually sends out important expeditions for obtaining rare animals, and presents specimens of every kind to schools, museums, etc. This collection contains many rare specimens, e. g., an enormous crampfish (*Gymnotus electricus*), measuring almost two meters, from the Orinoko, in Venezuela; they are in the tropical regions called "tremblers," and are much dreaded by the natives. In the inside of these fish there is a whitish, jelly-like organ, by means of which they deal powerful blows, which are often fatal, resembling in this respect the *Torpedo marmorata* found in our waters, whose electric battery, however, is not so strong. The large collection exhibited by the United States Commission, embracing all the useful and hurtful aquatic animals of North America, is well arranged and exceedingly instructive. The American fishes are brought before us partly in stuffed specimens, partly in colored engravings and photographs, giving the natural size in each case, and partly in plaster of Paris casts which are true to nature.

Of the many different kinds of vessels, the Indian boats differ most from anything we have. One of them is made of birch bark and "manned" by a serious-looking Indian and his squaw, who are seated in a covered boat with buffalo and deer heads, and can easily be transported over land. Such boats are called "hull boats," or "coracles," and are now also made in England, are used much by anglers, and occasionally carried by them to the fishing place. Portable folding canvas boats are often used in the United States, and several specimens of such boats are exhibited. The very pretty one built by Osgood is arranged for two persons; it is fifteen foot long, goes four inches in the water, carries 80 pounds, and weighs only twenty pounds. The most elegant boat, which has been most admired, is a canoe for one man, which is so well built that one like it has made the voyage from the Gulf

of St. Lawrence to the Gulf of Mexico, a distance of 2,500 miles.

We also find here models of all those vessels which are used for fishing on the high seas and for transporting live fish. Amongst the rest there is a model of the United States steamer Fish Hawk, which is exclusively devoted to the service of the United States Fish Commission, and is furnished with all the necessary apparatus for hatching codfish and shad during the voyage. In this we also recognize the practical method of our transatlantic cousins, of whom it may be said in the best sense of the term, "that they know how to do it." To conceive a good idea and to carry it out, is with them one and the same thing, but what a long distance does often separate the two with us! To give an idea of the care which has been taken to make every portion of the exhibit as complete as possible, we will mention that twenty-four different kinds of knives are exhibited, all serving some special purpose in connection with the fisheries. From the primitive implements used by the fisherman down to the most modern and ingenious contrivances no intermediate stage is left unrepresented. We see whole walls covered with every imaginable variety of hooks and of artificial baits, mostly flies; there are about 400 kinds. In one word, everything we see combines solidity and elegance, is so well made and so advantageously exhibited, that even a perfect tyro in the noble art of fishing will soon understand the use to which each object is to be put. There is no gap in the representation of the vast field of the fisheries and of the history of pisciculture, and the impression which this exhibit makes on the visitor is therefore powerful and lasting. Time forbids to mention more details, although the rich exhibit of works on the subject might well deserve it, and we leave the exposition deeply impressed with the energetic, well-directed and successful activity of the United States Fish Commission.

✓ HATCHING THE LOPIHUS.—Last week our Gloucester correspondent gave an account of the hatching of the "American angler," or "goose fish" (*Lophius americanus*), by Mr. A. H. Clark, and we naturally wanted more particulars concerning the obtaining of the eggs, time of hatching, etc. He writes as follows:—

(GLOUCESTER, MASS., Aug. 4th.)
The eggs were found floating near the surface in a string some ten feet or more long and about an inch wide, held together by the glutinous or jelly-like substance before mentioned, and not attached to any weeds or drift stuff. A part of them were placed in the "Chester Hatching-box," which was moored alongside the wharf, on the 15th of July. On the 19th the eggs were separated, and the embryo could be seen in them. Three days later fish were found alive, with the umbilical bag attached, and on the 27th the young was found to have absorbed on some of the young fish. Judging from this, it would be five days from the time of hatching till the fish were fully formed. We know how worthless the "monk-fish" is in a "practical point of view;" but still, notwithstanding he is principally noted for nothing better than a natural aptitude for "taking in" all he can, with a rapaciousness that might stamp him as a Jew among fishes, it cannot be denied that he is an open counterpane, which is certainly a recommendation; for, he smiles, the upper part of his head is on an island, and it is an invitation to all little fishes to come in out of the wet.

DEATH OF MR. W. A. LLOYD.—We regret to announce the death of Mr. W. A. Lloyd, so long and favorably known in connection with the Boston Aquaria. He died in England July 11th, at the age of 56 years. He planned most of the public aquaria in England and on the Continent, and was probably the best informed man upon the management of them in the world.

THE "FISH HAWK."—The United States fish-hatching steamer Fish Hawk arrived at Newport on the first of this month, and on the sixth made her first official trip with all the members of the Fish Commission on board except Prof. Baird.

CODFISH IN FRESH WATER.—In a translation of Portuguese over de Danske Ferskvandsfiske. Ved Arthur Pedersen. Naturhistorisk Tidsskrift. A. R. 12. B. 1-2. H. 1879, by Dr. T. L. Bech, Copenhagen, the following curious fact occurs: The catalogue below quoted includes strictly fresh water fishes only, and such marine fishes as are frequently found in fresh water. I have, however, been somewhat perplexed by a couple of species, which are stated by C. E. Varming, a merchant of Kolding, to be caught now and then in Kolding rivulet, namely Torsk (*Gadus morhua*), which in September and October is caught in abundance, and Tangsuar (*Spicara vulgaris*). Indeed, in the rivulet mentioned, my countryman has even himself caught or seen caught the common kullmule (*Merluccius vulgaris*) and pigliaen (*Acanthis vulgaris*) which are not found elsewhere on the coast. The Torsk is said of late years to go quite up to the basin at Odense; in the rivulet, however, it ascends scarcely beyond Korup. Why not have the codfish in the great lakes?

✓ A NEW SPECIES OF MACKEREL.—Gloucester, Mass., Aug. 9th.—A peculiar fish, somewhat resembling a mackerel, and about twelve inches long, was found among some mackerel that were caught in a seine seven miles south-east from this harbor on July 26th. Mr. John Convey presented it to Mr. A. H. Clark, Agent of the United States Fish Commission here. Old fishermen who saw it thought it a hybrid. The fish was forwarded to the headquarters of the Commission at Newport, where it was examined by Profs. Spencer F. Baird and G. Browne Goode. At first it was thought to be a species of *Awaia*, a fish said by Prof. Baird to resemble the tunny in form, and also having a corset of scales around the pectoral fin as the tunny has. The *Awaia* has been taken in large quantities on the coast, but they are worthless as food. A later and more thorough examination of the fish has been made by Prof. Goode, who now thinks it may be an entirely new species of the true mackerel family, heretofore unknown to science. The fish resembles the common mackerel (*Scomber scombrus*) in shape, being, possibly, a little thicker, is blue on the sides and back, and without the transverse markings peculiar to the mackerel.

✓ ANOTHER NEW FISH ON THE ATLANTIC COAST.—Newport, R. I., Aug. 4th.—The United States Fish Commission has obtained numerous specimens of a fish, before entirely unknown in the Western Atlantic. This is the frigate mackerel, *Awaia rochei*, twenty-eight barrels of which were taken in a mackerel seine, ten miles east of Block Island on the 3d of August by the schooner "American Eagle," Capt Josiah Chase, of Provincetown, Mass.

The frigate mackerel resembles in some particulars the common mackerel; in others the bonito, the genus *Awaia* being intermediate in its character between the scomber, and the related genera *Planys* and *Oreops*. It has the two dorsal fins remote from each other as in scomber, and the general form of the body slender, like that of the mackerel. The body is, however, somewhat stouter, and instead of being covered with small scales of uniform size, has a corset of larger scales under and behind the pectoral fins. Instead of the two small keels upon each side of the tail which are so noticeable in the mackerel, it has the single more prominent keel of the bonito and the tunny. Its color is grayish-blue, something like that of the pollack, the belly being lighter than the back. Under the posterior part of the body, above the lateral line, are a few cloudings of maculations resembling those of the mackerel. The occurrence of a large school of this beautiful species in our waters is very noteworthy, for the fish now for the first time observed are very possibly the precursors of great numbers of schools yet to follow. It is not many years since the bonito became an inhabitant of our waters, and the distribution and habits of the frigate mackerel are supposed to be very similar to those of the bonito and the little tunny, which also first came on the coast in 1871, and have since been found in considerable numbers.

The frigate mackerel has been observed in the West Indies and other parts of the tropical Atlantic as well as on the coast of Europe. In Great Britain it is called the plain bonito. It is not unusual in the Bermudas, where it is called the "frigate mackerel," a name not inappropriate for adoption in this country since its general appearance is more like that of the mackerel than the bonito, while in swiftness and strength it is more like the larger members of this family.

As a food fish, the frigate mackerel appears to be inferior to the bonito. G. BROWN GOODE.

In a late note Mr. Goode tells us that the axis appear to be very plenty off Block Island, one vessel coming into Newport which had caught and thrown away four hundred barrels of them. Our Newport correspondent, "Occasional," sends us a specimen of the fish, which is so fat that we should think it valuable for oil, if not for the table. We should have tested its merits as a food fish, had the letter describing it come earlier.

Sea and River Fishing.

FISH IN SEASON IN AUGUST.

FRESH WATER.	
Trout, <i>Salmo fontinalis</i> .	Muskellunge, <i>Esox nubilus</i> .
Salmon, <i>Salmo salar</i> .	Brook trout, <i>Salmo trutta</i> .
Salmon, <i>Salmo namaycush</i> .	Yellow Perch, <i>Perca flavescens</i> .
Land-locked Salmon, <i>Salmo salar</i> .	Grayling, <i>Thymallus tricolor</i> .
Black Bass, <i>Micropterus salmoides</i> ; <i>M. pollux</i> .	
SALT WATER.	
Sea Bass, <i>Centropomus atrivittatus</i> .	Bluefish, <i>Pomatomus saltatrix</i> .
Skipjack, <i>Achoeropus probato-</i>	Spanish Mackerel, <i>Scomber maculatus</i> .
Striped Bass, <i>Morone chirocentrus</i> .	Cero, <i>Cyprinops regalis</i> .
White Perch, <i>Morone americana</i> .	Bonito, <i>Sarda sarda</i> .
Weakfish, <i>Cynoscion regalis</i> .	Killdeer, <i>Micropogonias undulatus</i> .

✓ TROUTING IN NORTHERN MICHIGAN.—Jackson, Mich., July 28th.—I have pleasure in sending a memorandum of a recent experience away up in Northern Michigan.

A party of four left Jackson June 15th; ticket to Traverse City and return, fare \$9.50; arrive at Traverse City 5 A.M., 16th; a thriving little city at the foot of Traverse Bay, had an elegant breakfast at Park Hotel—lako trout, etc., etc. At 8 o'clock left for the head of the steamer City of Grand Haven and made landings at Old Mission, Elk Rapids and Torch Lake, where we arrived at 2 o'clock; steambort fare, \$1. Went directly to the Lewis House, a large, pleasant hotel; rooms for about fifty people, with all the accompaniments for hunting and fishing, boats, etc.; charges, \$10 per week. A couple of our party went out after a 3 o'clock dinner and brought in seventy pigeons; remained here one night and the next morning took a team for Cedar River in Belmar Township, the county seat of Antrim County; distance by wagon road, eighteen miles, and by steamer across Torch Lake, twelve miles. The steamer was towing rafts and not to be depended upon that day, so we took the team around, arriving upon the Cedar River about 3 P.M.; cost of team, \$4. Established our camp up the Cedar about half a mile from its junction with the Intermediate river which runs into Grass Lake, half a mile below the junction, and having speedily pitched our tent, prepared our bunk of cedar boughs and lighted our camp fire, our first meal was soon ready and disposed of; our pipes of peace smoked, and we turned in for a snooze after a few short yawns. Just at peep o' day our men, whom we had previously engaged for cook and camp keeper, reported for duty, he being a woodsman and living in the neighborhood. We were up, breakfasted, and off by the junction, and remembering the legend of the early bird, two of us went down and two worked up stream. The Cedar is a splendid little river about eighty feet wide on an average, and four feet deep, with the usual deep holes and shallow rapids; timber is very thick all along, pine and cedar trees are windfallen across and into the river from all directions, making it quite difficult to get along, but convenient to cross, as one can anywhere, on the logs. The water is very clear and ice-cold, as a couple of our party can testify on our second day's experience, having got in, of course, in the very deepest place. Returned to camp, all hands as per agreement, about 3 o'clock, with 230 speckled trout and five grayling.

On the last day, but two of our party fished any; the other two went on a voyage of discovery among the ancients, for know you the great mound builders once inhabited hereabouts, and their remains were assigned somewhat; but as this is more to deal with the present

* "Russland, England, Amerika," translated by Herman Jacobson.

than the past I shall let the Doctor attend to that part and give his profound ideas of the 2,000 year ago subjects which we unearthed, in his communication to the literary....

On the 24th, early morning, we struck tent, packed our traps, paid off our man \$1 a day, hired a team for \$1, and at 6 P.M. were landed across the country on the Grand Rapids and Indiana Railroad, at Mancosco Station; took train at about 10 P.M.; arrived at Grand Rapids at 5 A.M., and at Jackson at 9:30 A.M., with a nice lot of trout packed in sawdust, which we got at a mill at Grass Lake, and which were as nice and hard as though just from the water, almost, and no loss of flesh or appetite after our six days among the brook trout of Colar River.

We unanimously voted the trip a success, and that future years would find us, with rod and angler, trying for a bite.

H. SULLY.

TROUT IN NORTH CAROLINA.—*Sharon Hill, Aug. 3d.*—In your paper of July 29th, your correspondent, "A. F. C.," inquired about the trout in the French Broad River in North Carolina; and in continuation of the subject, you ask for information about the distribution of trout in that State. There are very few trout in North Carolina, in the streams that flow east into the Atlantic Ocean; but nearly all the streams that flow west, into the Tennessee River, contain them, often in great abundance. I have never seen them there in waters less than 2,000 feet above the sea. They are seldom found in large rivers, such as the French Broad, but they prefer the tributaries, and "push up" well toward their sources. They like to revel in the cool, shady waters, fresh from the earth, above the settlements where the trees and bushes are cut from the margins of the streams, and where foul waters are carried from plowed fields in times of rain.

I will enumerate some of the streams in North Carolina where trout may be found, commencing in Watauga County and going southwest. When I mention a river, I mean its tributaries. Trout are found in the Watauga River, in the corner of the same name in Mitchell County; they exist in North and South Toe Rivers; in Cane River, in Yancey County; in the headwaters of the French Broad, in Henderson and Transylvania counties; and in its tributaries, such as the Swannanoa and Ivy rivers, in Buncombe County; in the Big Pigeon River, in Haywood County; in Tuckasegee River, in Jackson County; in the Little Tennessee River, in Macon County, especially in Squagtown Creek, above the falls, where the good old Silas McDowell "planted" them many years ago, as he informed me, and where they may be caught among the clouds, nearly 4,000 feet above the sea, probably the highest habitat of the trout in the United States east of the Mississippi River. Probably the best fishing may be obtained in the Nantahale River, in Macon County, especially in Buck Creek, on "Chunkey Gal Mountain." This river is 2,600 feet above the sea, near Alec, Monday's house, on the main road from Asheville to the Hicktown and Cleveland, Tenn. Alec, can accommodate strangers comfortably, and can give them a bear hunt, also, as he is a fearless hunter and keeps good dogs. His address is Aquone, Macon County, N. C.

I could never ascertain whether trout are found in streams farther south than the Nantahale River.

They are not found in the Hiwassee, and there are contradictory reports about their existence in the headwaters of the Oconee River, in the mountains of Georgia. There is a railroad now from Salisbury to Asheville, in the mountains of North Carolina. When going to Mitchell or Yancey counties, one should leave the railroad at Marion, and go to Burnsville, or stop with Isaac English on the way. Tom Wilson is the "boss trout fisher" in Yancey County, and can entertain strangers. His address is "Big Tom Wilson," Burnsville, Yancey County, N. C.

Do not neglect to put in the "big," as he says he does not wish another, but smaller Tom Wilson to get his letters. Tom says he can catch trout at all times and seasons. I have seen him catch them at night, and when he made a large fire near the stream "to light 'em up," says the big fish bite best at night. The people among the mountains of North Carolina are very kind and hospitable. I will mention the names of some other persons there who will give information about fishing localities. At Asheville, Gen. Clingman and E. J. Aston. At Waynesville, Judge Guder studies practical ichthyology as well as law, and if not engaged on the Circuit, he will dispense the best fishing bait, a fly rod. At Franklin, in Macon County, Mr. Jackson Johnson. Rev. C. D. Smith will cheerfully give information to strangers. No one who visits Mitchell County should fail to go to the top of Roan Mountain, where Mr. L. B. Seale entertains travelers at his house among the clouds 6,470 feet above the sea, and where one may see a cheerful, blazing fire every morning and evening in summer. His address is Cloudland, Mitchell County, N. C.

JOSEPH WILCOX.

STROTHGAND, Pa., Aug. 4th.—In answer to the inquiry of "E. F.," as to whether there are trout in the French Broad, I will say that I spent last autumn between Hendersonville and Brevard, late county seat of Transylvania County, and was repeatedly told there were no trout in the French Broad, that stream having only a few black bass and more "jack." But in the upper waters of Mills River and Davidson River, and tributaries of the French Broad, trout may be caught, though they are not very plenty, as in the neighborhood in which I spent my time. I used nets wherever it was possible. In most of the small streams that empty into the upper French Broad, trout may be found in limited numbers, but are only caught with the worm. No fly fishing on account of the karel. I tried the fly in Mills River—a beautiful stream—but had no rise; the trout took worms, however, readily. This river can only be whipped by wading from ankle deep to waist, and I didn't care to get frozen for the privilege. I was with a party, two of whom were mountaineers and accustomed to wading in cold water. Two of us, one in the morning of our trip to the headwaters of Mills River and Mill Pigeon, one of the loftiest peaks in North Carolina, began to fish down the river early in the morning, and before they had gone a half mile were compelled to leave the water and thaw out, their hands being so numb they could not bait a hook. I did not want trout bad enough

for that. This was in late August. What the lower waters of the French Broad and tributaries afford I can't say, as I have never been there.

THE LAKES IN SOUTHERN CANADA.—*Canton, St. Lawrence County, N. Y., Aug. 2d.*—In your answers to correspondents, E. M., of New York, asks for directions to reach some of the lakes in the southern part of Canada, like Charleston Lake.

Your location of Charleston Lake is very accurate. You are also right about the chain of lakes north of it, but you fail to tell him how to reach them.

For the benefit of sportsmen, I will supply the required data; having been there from three different directions. I perhaps can give it as well as any. If a man has a boat of his own and wishes to take it with him, to reach there from New York City, or the central part of the State, his best plan will be to take cars to Cayo Vincent, thence by steamer to Gananoqua, put his boat in Gananoqua River and row up it about ten miles, when he will reach the first lake consisting of a chain of seven as beautiful lakes as a man would wish to see. He will also find a number of ponds scattered around among the hedges and mountains, consisting of what the inhabitants call Lime Lake, Long Lake, South Lake, Hugel Lake, Kindrick Lake, and a number of others without names, with good fishing in all of them and excellent duck bass fishing in most of them. I had the pleasure of spending a few days there last October, and found the fishing all that one could desire in the shape of small fishing; have taken bass from Leadmine Lake that weighed eight pounds, and gamy enough to satisfy the desire of any sportsman.

If a man has no boat and wishes to go light, let him take cars to Ogdensburg, cross over to Prescott, take the Grand Trunk Railroad to Lennoxville Station, hire a team to take him to Henry Slacks, at Post Bay, and inquire for John Slack, who has in his possession one of Huston's boats, and is an excellent guide, and will give you more fishing and fun in two weeks than a man can get at Saratoga in two months. These lakes and ponds are all within easy access of one another, and a good strong man can carry his boat from one to the other without any trouble, and by carting his duffel four miles he can reach Charleston Lake, where he will find good salmon-trout fishing, and scenery which any lover of nature can not help but admire.

J. C.

Another correspondent writes from Toronto, Aug. 4th: One of your correspondents asks where he can have some good black bass fishing. Send him to Lake Joseph, north of Toronto. He must take worms for bait, as all land there is rock, and does not contain worms.

DEACON DILL.

RECOVERED HOOKS.—*Jamesville, Wis., July 28th.*—In your issue of July 15th I see an article about a recovered hook, in which the writer says that he caught a fine trout weighing one pound, with his missing hook in its stomach. On July 23d, inst., two of our fishermen went to Indian Fork dam, ten miles up the river from here, and one of them caught a fine pike that weighed four pounds, and when caught it had a set of triple hooks all about two inches in length in his mouth. The hook was hooked in both the upper and lower jaw, and one of the hooks was broken off at the beard of the third hook. He had a lively time with him, as it was in very swift water and with a light rod. How long these hooks had been in his mouth he did not know, but he said they were very rusty.

J. C. T.

ANOTHER RECOVERED HOOK.—*Franklin, Tenn., July 31th.*—Your paper of July 15th contains an account of a "recovered hook," after remaining in the mouth of a trout for nineteen days. A somewhat similar experience occurred to me in the month of May last, on the waters of Bedford Lake. In November, of last year, I was fishing near Carpenter's Landing, and after a strike lost my hook (a No. 8 barbless) by the breaking of my line, and in May of the present year, while fishing near the same place, my son, who was fishing a few yards from me, caught a black bass with a barbless No. 8 hook fastened through the lower jaw. About a quarter of an inch of the point was lost, and in several places the rust had nearly destroyed the wire, so that in a short time the hook would have been released. The bass was in good condition, and did not seem to have suffered from the presence of the foreign body. As I was the only person on the lake using the barbless hook, I presume there can be no question raised as to its identity, and consequently as to the time it was carried by the fish.

Bedford Lake abounds in all the fish known to Western waters, and the number of logs, sunken stumps and characteristics of the bottom, make it impossible for those who fish for profit to exterminate them or ever seriously diminish their numbers.

D. B. C.

BASS FISHING IN SULLIVAN COUNTY.—*Narrowsburgh, Sullivan County, N. Y., Aug. 4th.*—To-day has been an eventful one in the history of this place, for the visiting as well as the native resident fisherman, A. Philadelphia, signified his intention, by telegram to the Messrs. C. L. C. J. Murray, the proprietors of the princely hotel, to visit them, coming prepared to catch bass, as he had read a letter in your paper relative to the splendid bass fishing at this place. I will mention at this point that considerable surprise has been manifested at the circulation of your paper; visitors from different sections of the country have visited us to try our fishing grounds from the reading of the article referred to.

Mr. Middleton was attended by the famous Delaware River fisherman, J. B. Bedford, Esq., a honors man of physical proportion and of a genial disposition. The different points of fishing ground were patiently fished, the clipper bait being used successfully; to-night Mr. Middleton congratulated himself on being the possessor of forty-eight bass, few weighing less than two pounds. The Narrowsburghians also were fortunate in capturing bass; eight boats with two or three occupants in each made up the fleet. This day has been a remarkable fishy day.

J. T. C. G. of the Great Outpost of Common Pleas, who happened here and he has been considered heretofore the champion fisherman, but to-day his flag is lowered, he having surrendered. The gentlemen of the *Graphic*, Messrs. Goodells, have been with us and were successful; their piscatorial outfit was magnificent and it has been the chief topic of conversation; also the graceful manner in which

they manipulated the rod and line, both gentlemen standing erect in the boat with fly rod in hand, stop reel, etc. Occasionally a fly as an experimenter would be cast to the game, then a grasshopper, next a pure gold spoon, trolling, last the ordinary slimy ground worm. The picture was fully up to the *Graphic's* best. Fifty pounds of bass were taken by them, which were packed in grass and ice and sent away. So much for your article signed "Willoughby." Come and see us, and let us see your friends. You will find it no hoax about our bass fishing.

BUSSELL.

NORTHERN MICHIGAN.—*Batavia, Ill., Aug. 3d.*—A party of Batavians just home from an excursion to Northern Michigan, and a stay of two weeks at Charlevoix, have not much to relate in way of information, though they have a great deal to say of their infatuation with that region, which is becoming every year more popular as a summer resort, and of the fishing, which they enjoyed exceedingly. On their way from Chicago up the lake, by steamer, two or three of them disembarked and tried their luck in Black Lake, about ten miles south of Grand Haven. This lake stretches from Holland, westward, to within a few rods of Lake Michigan. You can stand between the two, and throw a stone in either. Their waters have been made up by an artificial channel, the work of the government, so that vessels might run in there in times of storm and be safe. About ten years ago a lighthouse was erected at this point. Here they found excellent bass fishing. Now and then a muskellunge is captured in this lake. This piece of good fortune, however, did not fall to our boys. Spending several days there they took the train North for Port Huron, on Little Traverse Bay, and thence by boat to Charlevoix, on Pine Lake, into which the many trout streams thereabout. They speak in glowing terms of the sport they had there trout. The trout averaged well; once in a while an unusually fine one would be taken. While they were there, Rev. Mr. Goodwin, of Chicago, took on a fly one that weighed two and a half pounds, the champion of the season, so far. Good for the cloth.

In course of time I trust that I shall have some personal experience in this delightful region to talk about.

HIX.

SALMON ANGLING IN CALIFORNIA.—The anglers of San Francisco have a new field open to them for salmon angling. The *Bullfinch*, of that city, says:—

"For several years past the fishermen in Monterey Bay have taken a few salmon on their lines each summer, while trolling for herring and other surface fish. Within the past week, however, salmon have been so numerous that a great many have been taken with trolling lines, and the guests of the Hotel del Monte, at Monterey, have had rare sport in supplementing the professional fishermen. The fish taken have been in some instances of large size, and doubtless are a portion of the late summer run of salmon en route to the spawning grounds of the McCloud and other branches of the Sacramento River.

From a telegram received, it is ascertained that there were four boats out yesterday, the united catch being fifty salmon, the largest weighing twenty pounds.

"As salmon do not frequent the coast streams in summer, it follows that the discovery of an abundance of them off Monterey at this season of the year is proof that they go south instead of north of this port, as has heretofore been believed, between their spawning seasons. From A. C. Tubbs, who has returned to this city, it is ascertained that an examination of the stomachs of the salmon taken showed their food to be tomcod or frost fish, instead of smelts, sardines, anchovies and other surface small fish, as has hitherto been supposed.

"The discovery of salmon at Monterey opens a new fishing field to the people of this city, who will be able to indulge in the sport at less expense and discomfort than is the case with residents of Eastern cities, where the nearest salmon rivers are in Canada, and quite difficult of access."

CRAPPIE AND CALIFORNIA SALMON.—*St. Paul, Minn.*—I have been long wanting a paper that occupies the place that your journal does. There are many men who are by nature sportsmen, but who from lack of means and time cannot from experience become posted, and to this class your paper becomes invaluable; men who now and then have opportunity for a few days' fishing and shooting, and who do not like to go into the field entirely unprepared. I have never cast a fly before this season, and though I cannot claim any degree of excellence or grace, still have managed to get several strings of very handsome bass. Will some of your readers kindly give me information, as to what bait to use and how to fish for California land-locked salmon? There is a lake near my place in the central part of the State that was planted about five years ago, and the farmer living there has caught two or six white bait fishing for bass, quite good sized. I am going up there for a day or two, and would like to try my luck. Will they bite on a fly? And will you also please give me information concerning the fish called in the Western States the "crappie." I have never seen them elsewhere; they are shaped like a sunfish, but different color, and excellent table fish, though not very gamy. I have never found any one who could tell me to which class they belong.

AMATEUR.

The California salmon should be left to breed. The "crappie," or "crappie," is *Pomoxis nigromaculatus*.

HOW TO PACK A SALMON.—The best way, says Mr. Buckland, the well-known English naturalist, to pack a salmon, is to send away in a box, lined with a different silver paper, giving him, as it were, a new skin. The silver paper will adhere by means of the natural slime. The fish should then be placed in a box and buried in clean sawdust. When the silver paper is washed off with a sponge it will be found that the beautiful tints of the fish are better preserved by this mode of packing than by any other. Salmon, as Mr. Buckland points out, are without doubt at their best when caught actually in the water, and are then at their fall of "curl." This will disappear, and the fish become limp if placed in ice for a journey. Those, therefore, who wish to send away a fresh-caught salmon in its prime, should put the fish into water actually on the boil for five or ten minutes before packing it. Boiling water instantly consolidates the

albumen—i. e., the curd. The boiling process must of course be completed when the fish is to be eaten.

SALMON IN MAINE TAKE THE FLY.—It has been said that while salmon in most other waters take the fly at some seasons, those in Maine streams have persistently refused it. It would be very gratifying to know why they have declined it, and still more so to learn their reasons for reconsidering the question and resolving to accept it. In proof that they now take the manufactured insect, we publish the following dispatch which was received at Portland from Bangor one day last week: "J. F. Leavitt and H. L. Leonard, 'the red man,' have just returned from a trip and have brought with them the first salmon taken in Wassataquoik stream, which empties into the east branch of the Penobscot half a mile above the Hunt farm. They report that plenty more can be had in the same way."

FISH IN MARKET.—New York has been poorly supplied with fish during the last week. There are a few very large sheepshead coming in from the south coast of New Jersey, which will weigh from ten to thirteen pounds. Bluefish and weakfish are small, many of the former being under two pounds; kingfish very scarce. Fulton Market prices Aug. 10th, are: Salt water fish—striped bass, 25 cts. per pound; bluefish, 10 cts.; salmon, 45 cts.; mackerel, 18 cts.; weakfish, 15 cts.; Spanish mackerel, 40 cts.; halibut, 18 cts.; haddock, 10 cts.; cod fish, 18 cts.; eels, 18 cts.; sheepshead, 10 cts.; pompano, 75 cts.; smoked salmon, 30 cts. dry cod, 7 cts.; green turtle, 15 cts.; lobsters, 10 cts.; soft crabs, 75 cts. per dozen. Fresh water fish—whitefish, 12 cts.; lake trout, 15 cts.; frogs, 15 cts.; crawfish, 3 cts.

SALMON AND SEA-TROUT ANGLING IN CANADA.—The sport has been very poor on most rivers this season. A gentleman who spent some time on the Restigouche, Nepisiguit and Miramichi rivers reports the season backward and fish scarce. He spent sixteen days on the latter river, by invitation of the lessee, and took many sea trout (*Salmo fontinalis*), some of them over seven pounds in weight.

A FISH THAT SWALLOWS BIGGER ONES.—The Smithsonian Institution has received a very curious specimen of the fish kind, recently found on the fishing-banks of Gloucester, Mass., by Mr. A. Howard Clarke. It rejoices in the name of *Chasmodes niger*, and its peculiar distinguishing feature is the fact that its capacity leads it to swallow fishes which are twice as large and weigh four times as much as itself.

GRAYLING IN NEW BRUNSWICK.—We are informed by Dr. A. Ferber, of New York City, who has just returned from the salmon streams of that region, that he saw veritable grayling taken from Lake Umbagog, twelve miles up the St. Johns, where the fish are said to be white and the trout, red and white; the "white trout" was pronounced to be grayling (*Thymallus*) by the doctor, who is familiar with them.

HOW DO YOU PUT A CRAWFISH ON A HOOK.—A subscriber writes: "Can you obtain from some of your readers, who are black bass anglers, information as to the proper method of placing a crawfish on the hook to be used for bait? We therefore insert this to draw out all the knowledge on this subject that our bass fishers have, in preference to giving our own practice."

LEASE OF ROMANSKILL CREEK.—We understand that Messrs. H. Fuller, of the Erie Railroad, and E. Cahill have leased the fishing in three-quarters of the Romanskill Creek, near Milford, Pike County, Pa., for five years. The lessees propose to put in 3,000 trout this fall.

MENHADEN FISHERIES FAIL AGAIN.—A Boothbay, Maine, correspondent of the *Lewiston Journal* says: "Fish are very plentiful along shore; most every one who can man a dory is after them. The menhaden fishery is again a dead failure; the steamers have all gone South and the factories closed up for the season."

BLUE FISHING EXTRAORDINARY.—Mr. Harry Fuller, of the Erie Railroad, during seven days' fishing at Great South Bay, near Bay Shore, L. I., caught with a rod and reel, no less than 671 bluefish.

IOWA.—*Dubuque, Aug. 4th.*—Black and white bass fishing is the best known for years, but will not last long, as the river is going down and the sloughs drying up.

—A "boom" in menhaden or mossbunker oil is reported from New Bedford. The Standard of that city says: "The sales will aggregate about 2,500 barrels, the greater part of which was at 40 cents, and the remainder under terms not disclosed."

NEW PUBLICATIONS.

THE NUTTALL BULLETIN.—The July number of the *Bulletin* contains a great amount of valuable information from the pens of a number of our best known ornithologists. A notice of Dr. Shufeldt's memoir on the "Osteology of *Spizella cucularia hypoleuca*," by Dr. Coues, which opens the number, is illustrated by three beautiful lithographic plates. Mr. Ridgway contributes this number three articles of importance, one on "*Colinus longirostris* and its Geographical Races," another on "*Macrorhamphus gipripes* and *M. scolopacea*," and a third on "*Macrorhamphus gipripes* and *M. scolopacea*." Mr. Ridgway continues his "List of Occurrences of North American Birds in Europe," and Mr. N. T. Lawrence contributes a paper on "The Greater Long-beak (*Macrorhamphus scolopacea*). There are three papers by Mr. Allen in the July *Bulletin*. "Destruction of Birds by Lighthouses" gives the results of inquiries by Mr. Deane among the lighthouse keepers of the coast, a class of men who have rare opportunities for observing the passage of birds during the migrations in spring and fall. Another important question, the "Origin of the Instincts of Migration in Birds," and contains much that is new as applied to our birds. A "List of the Birds of Santa Lucia, West Indies," completes Mr. Allen's contributions to the last *Bulletin*. "Recent Literature" notices a number of valuable contributions to North American and European ornithological literature, and "General Notes" contain a vast amount of news items which will interest every ornithologist.

Game Bag and Gun.

—Address all communications to "Forest and Stream Publishing Company, New York."

GAME IN SEASON IN AUGUST.

Woodcock, *Philobeta minor*. Red-backed sandpiper, or ox-bird, *Tringa americana*. Black-bellied plover, ox-eye, *Spatula helvetica*. Great marbled godwit, or insular, *Limosa fedoa*. Long-billed curlew, *Nauclites longirostris*. Willet, *Totanus semipalmatus*. Turnstone, or calico back, *Streptopelia*. Tattler, *Totanus melanoleucus*. Red-breasted snipe, dowitcher, *Marechampus griseus*. Yellow-chance, *Totanus fasciatus*.

"This enumeration is general, and is in conflict with many of the State laws."

"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, surf bird, phalaropes, avocets, etc., coming under the group *Limosa*, or shore birds. Many States permit prairie fowl (pinnated grouse) shooting after Aug. 15th.

MIGRATORY QUAIL IN MAINE.

PORTLAND, Aug. 3d.

Editor Forest and Stream:—

Of 5,100 quail (*Coturnix communis*) imported to America this year, 2,600 came to Maine and arrived to my care in Portland June 9th. These birds were immediately forwarded to the various parts of the State, where they were liberated, and lots were sent from fifteen to seventy-five each. For the information of your readers in Maine I give a list of the cities and towns to which I forwarded birds.

St. Stephen, N. B. (adjointing Calais, Maine), Bangor, Winterport, Rockland, Wiscasset, Bath, Augusta, Richmond, Bowdoinham, Brunswick, Lewiston, Auburn, Norway, Bridgton, Saco, Kennebunk and vicinity of Portland.

I made a public request that reports be sent to me of their nesting, etc., number of eggs or young observed, localities of nests, where last seen in autumn, and arrivals here next season from their Southern migration, and any other items of interest. I have received reports from various localities, and hope to receive more and fuller ones later in the season.

The birds were observed to commence nesting within twenty days after liberation, and many nests with eggs were reported before July 1st. Two weeks or more later the young were hatched in those nests that had been undisturbed. From ten to fifteen eggs is a usual number to a nest, and eighteen the highest number yet reported. Some nests, found early, containing only a portion of the number of eggs to be laid, were deserted after having been moved over and left exposed. Had such nests been screened by standing grass, or low bushes, probably the birds would not have deserted them. After the full quota of eggs are laid and the birds are setting, there is less danger of desertion. Indeed, these quail have been so devoted to their domestic duties as to permit the noisy moving machines to kill them on the nests, the knives decapitating them, or the wheels crushing them. The birds that deserted their exposed nests are laying a full number of eggs, having probably nested again, and may bring forth later broods. Although the moving machines have destroyed a few birds and nests, the worst enemy of the quail here is the domestic cat. I learn of very many quail having fallen a prey to cats.

If our farmers appreciated the injury they suffer by the loss of the many hundreds of insect-eating birds killed by cats every summer, they would take steps to prevent it. All through the spring and summer puss is hunting in the fields along the hedges, not for mice, but for its more delicate and favorite food, the birds. And a single cat will kill scores of birds, old and young, in a season. Woodcock are not infrequently caught by cats, and our new game, the quail, are suffering great decimation, along with our smaller birds, from this cause.

The quail are very gentle, and not only nest within a few rods of houses and highways, but are observed feeding with the domestic chickens. The farmers take quite as much interest in these quail as do the sportsmen, and many have already learned to know the ventriloquial notes, that can be heard so far away.

Now, while writing of the quail (*Coturnix communis*), I wish to protest against subjecting this bird to the application of local names and misnomers. We have enough of confusion in the names of our birds without unnecessarily adding to it. This new bird is a QUAIL. It is nothing else.

Sportsmen of the Northern States may call our native Virginia partridge, or colin (*Oryzopsis virginiana*), a "quail" if it pleases them better than a more appropriate name, but do not apply a misnomer when there is no occasion whatever for it.

Messina is the city from whence these quail were shipped, and the term is no more appropriate than "New York, or Portland, as applied to quail. Do not use it. If the simple term "quail" is too short, call the bird a "migratory quail." Such a term is descriptive and appropos.

In conclusion, I would say that my predictions, so confidently made, have thus far been verified. The quail commenced breeding where liberated, immediately after their release, and have brought forth their young. Birds killed accidentally were found to be fat, therefore they have found sufficient food. I await with equal confidence to hear of their migration South in the autumn, and return next year. Beyond that my expectations give precedence to hope.

EVERETT SMITH.

Col. Wm. Rhodes, of Quebec, who is much interested in the success of the importation, has enlisted the aid of the local papers in securing for the birds immunity among the farmers. He writes the following to the *Quebec Morning Chronicle*, under date of Aug. 1st:—

The news I get of the migratory quail from the different parts of the country are very satisfactory: the birds are doing well, laying eggs, and in some cases the eggs have been hatched. The birds do not appear to wander, and they keep well out of sight, but their presence is easily detected from "dustings," "droppings" and "digs" into ants' nests, also from "calls" or "pipings" which occur in the evenings.

The inhabitants in the country take quite an interest in the farmer's quail. One respectable lady told me they sang more beautifully than the "rosginal," and when I questioned her as to their plumage, she said they were "blue," so I concluded she was, politically speaking, in a state of error. Our legislature, through the assistance of the Hon. Mr. Ross, M. P. R. for the County of Quebec, who got Mr. Watts, M. P. P., to draft the following amendment to the game laws, and which has now become law, has given this quail question important assistance, and for which they deserve our thanks: "Any person who shoots or kills any migratory quail in this Province before the 31st day of December, 1882, shall be liable to a fine of not more than five dollars, or an imprisonment of not more than fifteen days."

It is not, however, by legislation the migratory quail can be protected. Land owners have to understand these birds belong to the farm, like the robins belong to the garden and the swallows to the house; that they are a delicious bird to eat, and worth 50 cents a brace in the market, besides being an object of sport for the young man, and above all, that the quail will return to their native hills, when once they have been a quiet and retired life. The birds I have turned out on my land have not gone four acres from the spot they were let loose. The dry season is very much in favor of the young birds getting strong and growing rapidly. So far, the experiment is quite a success.

The Quebec game law has been amended to provide a close for the migratory quail to Dec. 31st, 1882.

MIGRATORY QUAIL.—The Rutland, Vt., *Herald and Globe* says that Judge Everts is in "receipt of unmistakable proof" that the migratory quail have returned to Rutland. They have been seen in the surrounding woods for several days, and their peculiar note cannot be mistaken. The judge was the pioneer in the movement for the introduction of migratory quail into this country, and has reason to feel gratified at the success of his pet project. The return of the birds in numbers to the spot where they first got their freedom in this country is proof enough of the practical success of Judge Everts' theory. The judge has just taken one of the subjects of his theory, says that he would rather know of the success of his quail project than to leave a fortune at his death. He predicts that the migratory quail will eventually become the most numerous of all the game birds of America."

It is also reported that "several nests containing young Messina quail have been discovered in the Lewiston and Auburn (Maine) suburbs. The largest number of birds found in one nest was four, in fifteen and the smallest number five. It was feared that many nests would be destroyed by the teeth of the moving machines during the haying season, but the hay-makers gladly responded to the request to look out for the nests in moving, and not a single case of loss from this cause has been reported in this country. One gentleman found that his cat had discovered a nest in his field and had killed two of the birds, just as he was about to put a small opening over the nest. The indications are promising for a large family of Messina quail in Maine next year."

TORONTO GAME AND FISH PROTECTION.—The *Toronto Globe* has this résumé of the game prospect in the vicinity of that city: "The patiently-awaited time of the sportsman has arrived, and the woodcock are now at his mercy. The fact of game being so scarce that hunters of the day are forced to penetrate the woods hundreds of miles in quest thereof, will attest to the fact that the game laws cannot be too rigidly enforced. Had the government past observed the economy in that direction which we are forced to observe, our sportsmen could enjoy their 'outings' in the vicinity of their homes, returning always with abundantly filled bags. The wholesale destruction of our birds of passage has tended more to their extermination than the denuding of the forest. This destruction applies to fish also. Who does not remember when the supply in the lakes was adequate for the demand of the residents upon its banks? This day is past owing to the destructive means used in catching them. Fishermen must now secure a license for their net privileges, while setting for fish in the spawning time in streamlets is strictly prohibited. Nor do the laws remain a dead letter on the statute book. Scarcely three months ago no less a personage than the President of the Long Point Game Association was fined heavily in Ontario for an infraction of the game laws by the County Inspector. If he shot four quail as alleged, each bird must have cost him \$11.50—\$46 being the amount of fine and costs. Inspector Kerr, too, has frequently given signal proofs of his vigilance, to the sorrow of many refractory fishermen. In the Twelve, the Fifteen, the Sixteen, and Twenty Mile Creeks, County of Lincoln, he made a raid on more than one occasion to advantage, securing in the shape of trophies the tackle hidden in the water for trapping the unfortunate 'finny tribe.' The Provincial Legislature is to be commended for extending protection to game and fish. The result will be satisfactory to the sportsman, though, like all enactments at their origin, the laws have yet to receive some alterations before they attain perfection."

MR. SOURCES ON DITTMAR POWDER.—*New York, Aug. 5th.*—Editor Forest and Stream:—Allow me through your columns to thank the Dittmar Powder Manufacturing Company for the insertion, in their advertisement, of the fact that I am not an agent for the sale of their powder. The Dittmar Powder Company, with all the works at Bangor, N. B., have put in, I believe, all the powder now as they are entirely under the direction of Mr. Carl Dittmar, and I believe no powder of this kind has ever been made in this country by any other man, and so the warnings against what is called old powder is a confession that Mr. Dittmar is afraid of his own compound, which he urged the people to buy last year. The changing of a name, and the putting a seal

over the top of a can, does not change the character of the compound, and I believe no one has asserted that the ingredients used, or the process of manufacture, are any different now than one year ago. When it is explained why it is that, from the same can which shows by pressure gauge below the strength which is safe with black powder for all ordinary guns, one cartridge will explode with a force so terrific as to tear to pieces the very best gun, and the next cartridge, and perhaps all the others, loaded from that can, give satisfactory results; and not until this is explained, will those who regard life and limb worth anything, experiment with this compound. After much consideration and some experiment, I have arrived at my theory as to the cause of such results; and I believe no pressure gauge, or strip of paper pasted on the top of the can, will prove effective against results in the future similar to those so often recorded in the columns of your paper in the past.

HENRY C. SQUIRES.

COBB'S ISLAND PRIZES.—*Poughkeepsie, N. Y., Aug. 7th.*—Editor *Forest and Stream*.—In your last issue, a correspondent who signs himself "Chasseur," writes in glowing terms of the splendid shooting to be had at Cobb's Island, Va., both now and during the late fall and winter months. He refers, also, to the kind-hearted Cobbs and Spades, as being thoroughly honest, and who will never overcharge their patrons to the amount of a single cent. Will "Mr. Chasseur" please inform your readers how long it is since the kind-hearted Cobbs and Spades ceased to charge during the ducking and goose shooting season, the modest little sum of \$5 per day each for their services, and \$9 per day for very ordinary board, besides half the geese and duck you may kill.

The writer has done considerable shooting on the coast, from New England to Currick, and of all the expensive places for accommodation offered, Cobb's Island, the kind-hearted Cobbs and Spades as guides, take the front.

ONE WHO HAS BEEN THERE. If this is the true state of affairs at Cobb's Island, there is reason to believe that the birds will fly in peace there. We hope "Chasseur" will inform us on this point, for the *FOREST AND STREAM* does not wish to act as the wreckers' luring light.

IOWA GAME PROSPECTS.—*Dubuque, Aug. 4th.*—Contrary to all expectation, the woodcock shooting has been very poor. It looked very favorable this spring and the birds got through nesting safely, but the extreme high water (the highest ever known) came along just at the time when they go on the islands and into the bottoms, and, of course, drove them out of their usual haunts, besides destroying all vegetation; they scattered around the woods and on the steep sidehills, and it is impossible to make a good bag. One of our market hunters was out for three days and got forty-eight birds, but most of the boys come back empty handed. We will have more quail this year than for many seasons, as the netters and pot hunters have not been able to get them, still they are far from plenty, and a dozen is a big bag now where fifty would be a common occurrence six years ago. We have very few pinnated grouse, but the ruffed are quite plenty in localities. We look for good duck shooting this fall on the river and woodcock are very plenty now, and although the young ones are hardly able to fly, the pot-hunters are after them, regardless of the fact that the law protects them until Aug. 15th.

JULIEN.

CONNECTICUT WOODCOCK.—*Windsor Locks, Hartford County, Conn.*—There has been a great deal of interest in sporting journals about the shooting of game unlawfully in this section. We have been to considerable pains to learn the exact truth of the several reports, and find that not a great deal is carried on. The towns of Windsor Locks, Windsor, East Windsor, Suffield, Enfield, Granby, East Granby, Simsbury and South Windsor represent a large number of genuine sportsmen, whose aim it is to protect the game until it can be killed lawfully. All agree in saying that the last open winter has seen a larger number of birds than has been seen here in a number of years. Your correspondent was out a few days recently (without a gun), and in passing through five swamps roused thirty-three woodcock. We also came across over twenty-five gray squirrels, but did not see one partridge. Quail are plentiful, and rather tame. We cannot account for the absence of partridge, except that we did not go to the proper grounds for them. The towns named aforesaid comprise nearly the whole of the northern portion of Hartford County.

G. P. Co.

TENNESSEE DOVE SHOOTING.—*Nashville, Aug. 6th.*—Our sportsmen are now enjoying the "dove season." With the ripening of the millet and corn these birds come by the thousand, and as there is no prejudice in this country against shooting them, large bags are daily made. H. C. Pritchett, one of our crack shots, bagged twenty-three one afternoon, and Messrs. Burgholz, Mitchell and two others brought home as their reward \$25. The young doves, when, as now, in good condition, make a most delicate morsel, preferred by many even to the quail. A few days ago I was in the country, and noticed with pleasure the fine prospects for fall shooting. Quail are exceedingly abundant, while squirrels and rabbits were never more numerous.

J. D. H.

SNIP SHOOTING AT GOOD GROUNDS.—*Good Ground, Shinnecock Bay, L. I., Aug. 2d.*—Snipe shooting is improving as the season advances, and the young birds begin to fly. We have been getting good bags right along for the past week, and the birds have commenced in earnest. Now, yesterday, Aug. 2d, we had a very good flight. Mr. A. Hass, New York City, killed 107 large snipe, and while I write, I hear guns continually. I anticipate a big bag again to-day. The young birds are coming on now, and I look for a good season during August and September.

WILLIAM N. LANE.

IOWA CHICKEN SHOOTING.—*Creston, Iowa, July 30th.*—There are more young prairie chickens this season than usual. Come out and help me hunt them. There will be fine shooting here in August—plenty of open prairie and room for all; no "beware of the dogs" and no "trespass on these premises" staring one in the face—all is open and free. Come and enjoy the great blessings of nature as spread out by the hand of God.

N. D. M.

MASSACHUSETTS.—*Springfield, Aug. 5th.*—Quail seem to be very plenty this season, and we hope to have some good shooting this fall.

BALSAM.

MINNESOTA.—Mr. Charles Hallock writes from Hallock, Kittson County, Minn., that the prospects for grouse and mallard shooting there are very good.

—The Canton Rod and Gun Club, Collinsville, Ct., have enlisted the aid of their local paper, the *Farmington Valley Sentinel*, to make public the game law, and to urge true sportsmanship.

SHOOTING MATCHES.

CAPITAL CITY GUN CLUB.—*Washington, D. C., Aug. 3d.*—The regular Saturday match of this club was deferred until yesterday (Monday) afternoon, when the members met at Eagle Park at the terminus of the Columbia Railway, where the matches will be shot in future. The grounds are perfectly suitable for shooting, and the club commutates itself on the change. After the match was completed Mr. Mills shot twenty extra balls, breaking them all, making his score forty, straight, without a miss. Mr. McLeod also shot twenty balls for practice, breaking them all, but as he had shot the minimum number in the matches and was leading, he declined to shoot for record until his lead is overcome. The series for the two gold medals is nearly closed, with three members, Messrs. McLeod, Woodbury and Mills, so close that either may win, all the other members being out of the race. Mr. McLeod's average before yesterday's shoot was 942 per cent, with the other two within one-half of one per cent. of him. He has shot at 230 balls, breaking 245. Mr. Mills, 290, breaking 249. We consider that good shooting for amateurs. Mr. Mills' shooting yesterday will place him one-tenth of one per cent. in the lead, which Mr. McLeod and Mr. Woodbury will no doubt try to overcome. The shooting yesterday resulted as follows:—Card rotary trap, screened; smoke target balls: handicaps rise:—

Yards.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E. L. Mills	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
W. W. Eldridge	25	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
C. J. Stoddard	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
J. R. Morhouse	25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
E. L. Mills (re-entry)	20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

HARRISBURG, Pa., Aug. 7th.—Match between the Social Gun Club, of Harrisburg, and the West Fairview Club, 15 balls each, 21 yards rise. F. P. Haeublen, of Harrisburg, and Mr. White, of Fairview, judges, and J. B. Bolton, of Hummelstein, referee. The Fairview club have still another match on hand with a team from Harrisburg under Mr. James McKee.

S. Pease	0011111110101—11	Wm. Wade	1001000101111—9
J. May	110011101111—11		
J. Koons	001111101110—10		

Wm. Allen	10111101111—12	J. A. Oyster	10010101010100—5
H. Dunbar	110110111011—12		
Hippensteel	1110101101010—8	Total	33

TYTUSVILLE, Pa., Aug. 6th.—Card's revolving trap; 30 yards, smoke balls:—

F. Hoffer	8	J. Theobald	9
W. Davidson	9	J. Crosby	9
J. C. Phillips	8	J. Hocking	9
V. Boughton	9	F. Reide	9
C. Hardenberg	8		

Second Match:—			
Hoffer	9	Theobald	8
Davidson	7	Crosby	8
Phillips	10	Hocking	7
Boughton	10	Reide	10
Hardenberg	8		

Third match:—			
Capt. Boughton	10	Capt. Reide	10
Crosby	9	Hardenberg	9
Phillips	9	Theobald	9
Hoffer	9	Davidson	9
Moran	8	Shattuck	10
Serritt	9	Wilson	7
Flemming	8		

Total	62	Total	61
Fourth match:—			
Capt. Boughton	10	Capt. Reide	10
Crosby	10	Hardenberg	8
Phillips	9	Theobald	9
Hoffer	9	Davidson	9
Moran	8	Shattuck	10

Total	46	Total	45
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FOUNTAIN GUN CLUB.—The regular monthly shoot of the Fountain Gun Club, Aug. 4th, 7 birds each, 5 ground traps, handicapped rise, 50 yards boundary, use of both barrels, resulted in the following score: J. Goppert, 23 yards, killed 14 straight; R. Van Staten, 22, 13 straight; J. B. Talbot, 30, 6; L. H. Smith, 30, 6; W. Martin, 23, 6; J. Fisher, 21, 6; W. R. Hunter, 23, 5; J. White, 23, 5; H. Hass, 24, 5; J. Kennedy, 21, 5; W. Cherry, 23, 4; E. Bond, 21, 4; C. Lemken, 24, 4; Captain Whitman, 21, 4; E. H. Madison, 30, 3; B. Cross, 21, 3.

HARRISBURG, Pa., Aug. 4th.—A well organized and conducted gun club is a good institution, even in this age. The busy cares of a business life must, now and then, be laid aside for awhile for the indulgence of those pleasures which make our lives happy.

To manipulate a gun or rifle skillfully and accurately—to be "a good shot," as the phrase is—is indeed an accomplishment, and I know of no means so well adapted to elevate the standard of accuracy in shooting as the friendly rivalry that obtains in a gun club where all the members want to become good shots.

We have such an institution in Harrisburg, which is yet in its infancy, but which, judging from the keen interest its members appear to feel in its future, promises to be a success.

Its membership numbers about thirty now, and out of these thirty a very clever shooting team can readily be selected.

A real live pigeon shooting match, where all is good feeling and earnestness, is of all sports, the most exciting and pleasant. It is a real champagne. A challenge came from the West Fairview Driving Park, last Saturday, the 31st ult., witnessed by, probably, 250 spectators. Shoot at 13 birds apiece from a ground trap, 21 yards rise, 80 yards boundary:—

HARRISBURG.		WEST FAIRVIEW.	
Pease..	001111111*11-11	Allen.....	10111111010111-12
May.....	1100111111111-12	Dunbar.....	11010111111011-12
Roos.....	0101110011110-10	Hippensteel..	11110100100010-8

While it is manifest that the score is not first rate, about 60 per cent. of our birds having gone away or fell at the hands of scouts, it must be born in mind that it is our first match and our teams on both sides are comparatively inexperienced. Yet the missing of birds on both sides was unaccountably frequent, for this was done by good marksmen.

ANON.

The Kennel.

—Address all communications to "Forest and Stream Publishing Company, New York."

OF ENGLISH DOGGES*

The first Section of this discourse.

* The Preamble or entrance, into this treatise.

I wrote unto you (well beloved friend Gesner) not many years past, a manifold historie, containing the divers forms and figures of Beastes, Byrdes, and Fyshes, the sundry shapes of plantes, and the fashions of Hearbes, &c.

I wrote moreover, unto you severally, a certaine abridgement of Dogges, which in your discourse vpon the fourmes of Beastes in the seconde order of mylde and tameable Beastes, where you make mencion of Scottische Dogges, and in the wynding vp of your Letter written and directed to Doctor *Thurax*, comprehending a Catalogue or rehearsal of your bookes not yet extant, you promised to set forth in print, and openly to publishe in the face of the worlde among such your workes as are not yet come abroad to light and sight. But, because certaine circumstances were wanting in my breuery of English Dogges (as seemed unto mee), I stayed the publication of the same, making promise to send another abroad, which might be committed to the handes, the eyes the eares, the mindes, and the iudgements of the Readers. Wherefore that I might performe that precisely which I promised solemnly, accomplishe my determination, and satisfy your expectation: which art a man desirous and capable of all kinde of knowledge, and very earnest to be acquainted with all experimentes; I will expresse and declare in due order, the grand and general kinde of English Dogges, the difference of them, the vse, the properties, and the diuerse natures of the same, making a tripartite diuision in this sort and manner.

All English Dogges be ether of,	A gentle kinde, seruing the
	A homely kind, apt for sundry necessary vses,
	Contraheing the meeete for many toyes.

Of these three sortes or kindes so meane I to entreate, that the first in the first place, the last in the last more, and the myddle sort in the myddle seate be handled. I call the vniuersally all by the name of English dogges, as well because England only, as it hath in it English dogs, so it is not without Scottische, as also for that wee are more inclined and delighted with the noble game of hunting, for we Englishmen are addicted and giuen to that exercise, and painefull pastime of pleasure, as well for the plenty of fleshe which our Parkes and Forests do foster, as also for the oportunitie and conuenient leisure which wee obtaine, both which, the Scottes want. Wherefore seeing that the whole estate of kindly hunting consisteth principally,

In these two (in chasing the beast) that hunting points.	In taking the byrde (is) in fowling
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It is necessary and requisite to vnderstand, that there are two sortes of Dogges by which meanes, the feates within specified are wrought, and these practises of acnetic cunningly and curiously compassed,

Two kindes of Dogges	One which roseth the beast and contenth the chase.
	Another which spryngeth the byrde and leueth it light by pursuit.

Both which kyndes are termed of the Latines by our common name that is, *Cane Venatici*, hunting dogges. But because we Englishmen make a difference between hunting and fowling, for that they are called by these seuerall wordes, *Venatio* & *Auicinium*, so they tearme the Dogges whom they vse in these sundry games by diuers names, as those which serue for the beast, are called *Venatici*, the other which are vsed for the fowle are called *Auicinatorij*.

The first kind called Venatici	The first in perfect smelling
I diuide into three sorts.	The second in quicke spring
	The thirde in swiftnesse and quicknesse
	The fourth in smelling & nym-bienesse
	The fift in subtiltie and deeuilfulness.

Of the Dogge called a Harrier, in Latin *Leuerrarius*.

That kinde of dogge whom nature hath indue with the vertue of smelling, whose property it is to vse a lustines, a readines, and a courageousnes in hunting, and draweth into his nostrills the ayre or sent of the beast pursued and followed, we call by this word *Sagax*, the *Gresius* by this word *technutis* of tracing or chasing by fowle, or *simulatin* of the nostrills, which be the instruments of smelling. We may knowe these kinde of dogges by their long, large, and bagging lippes, by their hanging eares, reaching downe both sydes of their chappes, and by the indifferet and measurable proportion of their making. This sort of Dogges we call *Leuerrarios* Harriers, that I may comprise the whole nuber of them in certaine specialties, and apply to them their proper and peculiar names, for so much as they cannot all be reduced and brought vnder one sorte, considering both the sundry uses of them, and the difference of their seruice whereto they be appointed.

The Hare	
The Foxe	
The Wolfe	
The Harte	
The Bucke	
The Badger	Some for one thing and some for another.
The Otter	
The Polcat	
The Lobster	
The Weasell	
The Conny, &c.	

As for the Conny, whom we have lastly set downe, wee use not to hunt, but rather to take it, sometime with the nette sometime with the ferret, and thus euery seuerall

THE HALFORD-HYDE MATCH ABROAD.—A very good notion of the current English opinion on the recent scrub match between English and American experts at Wimbledon, may be formed from the clippings from London journals given in our rifle columns. The timely action of the National Rifle Association on this side the water, and its consistent assertions that the American squad could not be recognized as a representative body, and had no authority to assume any such character, had a good effect in inducing the British National Rifle Association to take a similar attitude toward it. We have failed to note that any special effort was made by the English papers to dwell on the merits of American rifles, and generally, in its only honest guise, as an advertising scheme, the match was a flat failure. There is no evil, it is said, entirely unmixed with good, and we will wait patiently for the kernel of consolation from the midst of this *olla podrida* of mismanagement. If it will only lead to the utter stamping out of that pest of rifle shooting, the professional—as illustrated in the person of the American team manager in the disgrace of July 21th—the match would have been a grand and dazzling success, and none will regret to see a Hyde tanned in its own pickle.

ENGLISH VIEWS OF THE HYDE-HALFORD MATCH. The London exchanges of the 26th ult. bring the comments of the English press on the fiasco of the 24th at Wimbledon, and it can hardly be said that Hyde's advertising intentions were very fully realized on that side the ocean any more than on this side. Some of the papers comprehend the insignificant character of the match, while others persist in styling it an international affair. The *Echo* says: "On Saturday the great long-range match with any rifles between Sir H. Halford's British team and Mr. F. Hyde's American team was contested. The contending teams were not recognized as national representative teams, but simply as the teams of individuals. The best men, however, that the countries could produce combined, armed with the most highly finished and accurate weapons."

The *Pall Mall Gazette* devotes two lines to a report of the match, saying: "The international match between the British and American teams was shot earlier in the day, and was won by the British by 79 points."

The *Times*' report of the match says of it: "The great long-range match with any rifles between Sir H. Halford's British team and Mr. F. Hyde's American team was shot on Saturday. It has been specially announced that the contending teams are not recognized as national representative teams, but merely as teams of individuals. No such announcement, however, could deprive the match of its interesting character, it being shot by the best men that the respective countries can produce, armed with the most highly finished and accurate weapons that are made."

From an extended report in the *Daily Telegraph* the following is taken: "The most interesting event on Saturday was that between the British and the American teams at long distances, though it was not officially recognized either here or across the Atlantic, the men shooting simply as individuals. During the meeting our American cousins had shown themselves such adepts with the small-bore rifle that had there been any formal betting the odds would certainly have been in their favor, notwithstanding the defection for private reasons of two of their best shots. Their housework when practicing for this match, and when they beat the top score for the Elcho Shield, did much to create this strong feeling of confidence, but as the sequel proved, their supporters had reckoned without their host. The weather, both as to light and wind, was unreservedly in favor of good shooting, and the British team—which, by the way, did not include a Scotchman—took full advantage of it. At the termination of the match Sir H. Halford, the captain of the British team—to whose excellent judgment in the selection of the team this victory is due—called for three cheers for the Americans who, he mentioned, had never before been beaten. The demand was most heartily responded to; and Mr. Hyde, responding to the compliment, took credit for having taught the British how to beat the Americans, by inducing them to adopt the breech loader in lieu of the old muzzle-loader. He expressed his regret at the absence of Dr. Clark and Mr. Farrow, whose desertion had contributed to their defeat."

The *Standard* comprehends the situation very clearly when it says: "But for the first time in its history the closing day witnessed a great rifle match between teams of eight men respectively, representing Great Britain and America. Although it was originally announced that this was to be considered as an international contest, the National Rifle Association of America declined to consider the gentlemen visiting England as a representative team, and it therefore simply resolved itself into a match between 'Elights' of America and the United Kingdom, selected by their elected captains, Gen. Hawley (7) and Col. Sir Henry Halford. The contending teams were the same as for the Elcho Challenge Shield, viz., 15 shots each at 800, 900 and 1,000 yards. Through some misunderstanding among the American riflemen, Mr. Rockwell was substituted in the team for Mr. Farrow, and, owing to a breakdown with his rifle, which had to be changed at 900 yards, this gentleman made a very low score."

The *News*, speaking of the contest, says: "Of the two competitions to which all the shooting was on Saturday confined, chief interest naturally centered in the international match. There was much curiosity to see whether the Americans would be able to rival the wonderful scores they had made at Houndsdown on Friday, and great anxiety to insure accuracy of marking. To this end the Council had consented, on the requisition of the British team, to allow the presence of two strangers in the butts, charged with the duty of watching and verifying every shot on behalf of the Americans, whose captain had, however, declared that he considered such a precaution quite unnecessary. They commenced the match at 800 yards about 10:30, under perfectly favorable conditions of wind and light. At the very first round the British began to draw away, and were never afterwards caught, although the Americans struggled hard to reduce the lead. In justice to them it must be said that they were heavily handicapped by the defection of one of their team and the non-appearance of a famous marksman on whose presence they had relied. The reserves had to be called up, and though one of them shot very steadily, the other yielded to the strain of a position that might try the nerves of many a good man. The British, on the contrary, was probably the strongest team ever brought together in this country. Their shooting at the first range was simply superb. At the conclusion of the match Sir

Henry Halford asked his team to give three cheers for the Americans, over whom they had never expected to gain such a victory. In reply, Mr. Hyde, who acted as captain in Gen. Hawley's absence, said he claimed the victory for the Americans, inasmuch as they had taught Englishmen to discard the muzzle-loader and take to the breech-loader, and also not to depend on individual merit, but to strive altogether with one object in view. After a cordial interchange of cheering the teams separated."

Archery.

—Address all communications to "Forest and Stream Publishing Company, New York."

BUFFALO VS. HIGHLAND PARK.

HIGHLAND PARK, Ill., Aug. 24.

Editor Forest and Stream:

During the recent grand annual meeting, at Buffalo, arrangements were made by the Buffalo Toxophilites and the Highland Park Archers to shoot a series of four matches, on the following conditions, viz.: Each club to shoot a team of six, on its own ground, 90 arrows at 100 yards, the scores to be reported by mail.

On the day set for the first match, Highland Park succeeded in getting out only four of the team, and on the date appointed for the second, Buffalo was one man short. Though the shoots on the first two days cannot be called matches, we give the scores. It will be seen that the Highland Park Archers won on only each club presented its full team.

First match, July 24th:

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
F. Sidway	15-71	21-102	22-102	21-102	84-402
E. L. Parker	15-71	21-102	22-102	21-102	84-402
F. N. Granger	15-71	21-102	22-102	21-102	84-402
H. S. Hill	15-71	21-102	22-102	21-102	84-402
E. S. Spaulding	15-71	21-102	22-102	21-102	84-402
E. S. Smith	15-71	21-102	22-102	21-102	84-402
Grand Total	15-71	21-102	22-102	21-102	439-1,959

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
W. E. Swartwout	21-102	21-102	22-116	21-102	85-439
Dr. E. B. Weston	16-85	17-57	18-80	20-76	71-399
Mr. O. W. Kyle	20-74	12-61	20-76	20-80	72-291
H. C. Carver	16-54	15-69	16-64	18-81	65-264
Grand Total	21-102	21-102	22-116	21-102	295-1,269

Second match, July 24th:

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
C. G. Hammond	15-71	21-102	22-102	21-102	84-402
N. E. Swartwout	14-52	20-78	20-102	22-108	76-399
O. W. Kyle	19-87	15-77	17-87	19-79	72-330
Geo. C. Ball	16-64	21-80	14-66	22-83	73-293
J. R. Street	18-70	13-63	16-68	16-70	63-271
Dr. E. B. Weston	19-85	18-75	17-65	14-52	68-269
Grand Total	15-71	21-102	22-102	21-102	438-1,978

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
F. Sidway	19-83	19-81	20-84	20-98	78-356
E. L. Parker	18-50	20-90	15-65	20-101	73-349
F. N. Granger	17-70	18-88	18-79	19-83	72-328
H. S. Hill	15-63	18-95	20-82	17-87	70-327
E. S. Smith	16-80	18-80	16-61	19-83	69-321
Grand Total	19-83	19-81	20-84	20-98	342-1,720

Third match, July 25th:

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
C. G. Hammond	21-95	23-121	22-88	22-128	90-432
F. N. Granger	16-102	16-102	17-111	18-92	73-387
Dr. E. B. Weston	21-103	18-116	19-77	19-81	87-377
O. W. Kyle	14-58	18-78	19-101	18-76	69-313
E. S. Swartwout	17-71	18-82	16-69	16-70	68-292
H. C. Carver	13-43	11-62	21-63	20-79	65-247
Grand Total	21-95	23-121	22-88	22-128	455-2,069

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
F. Sidway	15-75	21-81	21-81	21-107	78-344
F. N. Granger	21-73	18-80	17-79	21-115	77-317
Townsend Jarvis	13-55	12-48	16-71	15-75	55-229
W. E. Swartwout	17-70	18-88	18-79	19-81	73-318
E. L. Parker	10-40	14-69	18-78	12-46	54-224
H. S. Hill	18-76	18-78	17-69	18-96	71-321
Grand Total	15-75	21-81	21-81	21-107	402-1,744

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
C. G. Hammond	21-95	22-129	22-129	24-139	89-471
F. N. Granger	16-102	16-102	17-111	18-92	89-407
Dr. E. B. Weston	21-113	24-112	21-105	21-67	87-397
N. E. Swartwout	20-82	20-110	20-102	19-83	78-377
O. W. Kyle	17-76	18-89	20-84	18-92	75-357
Geo. C. Ball	13-49	19-59	21-101	6-28	59-277
Grand Total	21-95	22-129	22-129	24-139	469-2,257

	1st 24.	2d 24.	3d 24.	4th 24.	Totals.
F. Sidway	24-136	23-129	22-132	22-100	91-497
F. N. Granger	21-107	23-129	18-70	23-95	82-401
E. L. Parker	18-84	25-95	19-65	23-121	81-365
H. S. Hill	17-65	18-89	20-84	18-92	75-357
Townsend Jarvis	11-51	12-58	13-59	9-47	45-217
Mr. Gester	13-45	11-55	13-59	10-42	47-181
Grand Total	24-136	23-129	22-132	22-100	422-2,038

From the foregoing scores, and the following incomplete analysis of them, it will be seen the shooting was very good for American archers:

Average per man of all scores.	333.5
Average per man, Buffalo Toxophilites.	321.5
Average per man, Highland Park Archers.	342.5
No. scores over 400, by Buffalo Toxophilites.	3
No. scores over 400, by Highland Park Archers.	4

The following analysis is made from the two complete matches, as we have not a full score of the first, and a different number of gentlemen took part in them.

No. times 24 successive hits, by Buffalo	1
No. times 24 successive hits, by Highland Park	2
Highest score, by Mr. Sidway, of Buffalo.	91-497
20 highest score, by Hammond, Highland Park	89-471
Average for each 24 arrows	84.9
No. scores with 24 arrows reaching 100, by H. P.	2
No. scores with 24 arrows reaching 100, by B. T.	9
No. scores with 24 arrows reaching 120, by H. P.	7
No. scores with 24 arrows reaching 120, by B. T.	5
No. scores with 24 arrows reaching 130, by H. P.	1
No. scores with 24 arrows reaching 135, by B. T.	2

GRANGER SMITH'S SCORE.—Chicago—

	100 Yards.	80 Yards.	60 Yards.	Totals.
July 24th.	25-105	31-111	21-113	77-329
July 25th.	20-94	31-121	23-117	80-332
July 26th.	21-112	31-111	21-111	73-334
July 30th.	34-144	35-145	19-89	89-378
Grand Total	25-105	31-121	23-117	328-1,360

Average, 82 hits, 340 score.

	American Rounds.				
	60 Yards.	50 Yards.	40 Yards.	Totals.	
July 17th.....	28-148	27-145	30-162	85-455	
July 23d.....	32-162	25-145	30-172	77-429	
July 24th.....	27-149	25-149	30-180	86-478	
July 28th.....	32-114	27-147	30-198	79-459	

Average, 82 hits, 456 score.

Darkness lessened my 60 yards score July 30th, otherwise I hoped to have scored my first 400 point York Round. July 29th, after finishing my York Round I continued at 60 yards and made 47 consecutive hits at that distance. Have only shot about a dozen American Rounds in all, and pay very little attention to same.

THE SPIRIT OF ARCHERY.—Hatchcock, N. J., July 30th.—I think Mr. Walworth hits the nail on the head in his article last week on "Innovations in Archery," and "Young-Man-A-Fraid," archery is wrong in comparing archery with rifle shooting. Archery does not compete with rifle shooting in the way of accuracy. Archery is a splendid exercise, and in its present shape requires long and patient practice before any results are obtained in the way of scores. The fact that it is so difficult lends a certain charm to it. If all sorts of improvements are to be added to the long bow in the way of patent sights, triggers, arrow holders, etc., why not take up the cross bow or the rifle at once? Even in rifle shooting there is a limit, and rests, hair triggers and telescope sights are prohibited.

W. HOLBERTSON.

HAWTHORNE VS. ORITANS.—Match at single York Round between teams of 4 of the Hawthorne Archers, of Boston, Mass., and Oritans Archers, Hackensack, N. J.

	100 Yards.	80 Yards.	60 Yards.	Totals.
C. de R. Moore.	34	31	101	217
Col. Frank Brandreth.	30	62	59	247
Col. H. L. Green.	41	91	71	303
W. Holbertson.	31	41	37	109
Grand Total	136	225	268	629

Cricket.

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FIXTURES.

Aug. 12th, at Paterson, N. J.—New York vs. Paterson.
Aug. 14th, at Syracuse.—Quakers vs. Lamona.
Aug. 16th, at Chicago.—Mound City, St. Louis, vs. Chicago.
Aug. 16th, at Newark, N. J.—Trenton vs. Newark.
Aug. 20th and 21st, at Frankfort—Girard vs. Young America.
Aug. 23rd, at Longwood.—States Island vs. Longwood.

The New Fox Chase Cricket Club played an antagonized eleven, composed of members of the Germantown, Belmont and Chestnut Hill, on July 31st, and were defeated by 55 runs.

—Landsdowne and Pennsylvania Hospital played on July 31st with scores 34 and 43 respectively.

—The Germantown second defeated the Galbraith on July 31st by an innings and 67 runs. For the victors Brodie contributed top score of 67; Reed Morgan 15; H. Thurman 12 and B. Robinson, not out.

—The Lawrence, Mass., eleven have played five matches this season, and have won three.

George Wright has received a very flattering offer to manage the Cincinnati base ball next year, but the prospects are that that cricket will engage his attention during 1891.

ETON AND HARROW.—Played at Lord's, England, July 9th and 10th. Won by Harrow by 95 runs. Score:—

	First Innings.		Second Innings.
H. C. Ramsay, c Newton, b Paravitchi	28	b Paravitchi	11
A. F. Kemp, b Paravitchi	35	c Curzon, b Throwley	18
P. H. Martineau, c Paravitchi, b Bainbridge	15	b Paravitchi	2
J. Dunn, c Grenfell, b Bainbridge	21	0	0
M. C. Kemp, b Paravitchi	9	c c and b Bainbridge	15
F. W. Stancombe, c and b Bainbridge	9	c c and out	14
F. W. Stancombe, b Paravitchi	8	b Paravitchi	1
F. W. Penaber, c and b Paravitchi	12	b Paravitchi	11
W. E. Haden, c Paravitchi, b Bainbridge	9	c Onstov, b Bainbridge	49
F. G. L. Lucas, b Paravitchi	28	b Paravitchi	0
H. J. Stoddart, c Paravitchi, b Bainbridge	10	b Paravitchi	9
Bye 1, leg-bye 1, wide ball 1	1	c Byes 2, wide balls 2	4
Total	148	Total	112

First Innings.	Runs.	Second Innings.	Runs.
Lord Threlkely, c M. C. Kemp, b Ramsay	11	b Lucas	0
Lord Curzon, c and b Lucas	9	c M. C. Kemp, b Lucas	11
P. J. de Paravitchi, b A. F. Kemp	35	b A. F. Kemp	9
P. J. de Paravitchi, c A. F. Kemp, b Ramsay	11	c and b A. F. Kemp	0
A. J. Polhill-Turner, c and b Lucas	1	not out	31
A. Hughes-Onslow, c and b Lucas	24	b A. F. Kemp	6
W. F. Cave, c and b Lucas	10	c M. C. Kemp, b Ramsay	10
W. F. Cave, c and b Lucas	1	c Hodow, b Ramsay	2
W. F. Cave, c and b Lucas	5	b Ramsay	1
A. E. Wotton, not out	7	c M. C. Kemp, b A. F. Kemp	8
J. Jardine, c Ramsay, b Lucas	0	run out	2
B. C. 4, leg-by 1, wide ball 1	5		
Total	167	Total	88

ANALYSIS OF THE BOWLING.

	Overs.	Maidens.	Runs.	Wks.	Wides.
Paravitchi	29	35	50	5	0
Bainbridge	24	40	8	0	0
Polhill-Turner	15	6	25	0	0
Jardine	2	0	10	1	1
Paravitchi	35-2	18	42	7	0
Bainbridge	35	11	44	2	0
Polhill-Turner	5	1	12	0	0
Jardine	2	0	11	1	0

ETON—FIRST INNINGS.

BOX-FIRST INNINGS.					
Ramsay	27	12	40	2	0
Lucas	43-2	23	37	7	0
A. F. Kemp	21	10	24	1	0
McNeill	8	3	6	0	0

Second Innings.

Second Innings.					
A. F. Kemp	33	16	37	4	0
Lucas.....	36	19	30	2	1
Ramsay.....	12	6	18	3	0

LONGWOOD vs. LAWRENCE.—Played at Lawrence, Mass., July 31st, won by the visitors by an innings and 21 runs. Score:—

LONGWOOD.

Dutton, b. Brice.....	14	Winston, stumped Johnson, b. Brice.....	0
Jones, b. Brice.....	24	Brice.....	0
Hubbard, c. Wood, b. Brice.....	21	Tanner, b. Brice.....	0
G. Wright, c. Hotham, b. Brice.....	10	Carter, b. J. Scott.....	0
Wood, not out.....	21	Connelly, not out.....	0
Peckody, b. J. Scott.....	6	Byes, b. Brice.....	0
Train, b. Brice.....	6	Byes, b. Brice.....	0
Fay, b. Brice.....	19		
Total.....	119		

LAWRENCE.

Ellis, b. First Innings.....	2	Second Innings.....	0
Johnson, b. G. Wright.....	2	Jones, b. Hubbard.....	0
Brice, b. G. Wright.....	13	G. Wright.....	0
Hotham, b. G. Wright.....	2	not out.....	24
Scott, b. G. Wright.....	2	not out.....	24
Preston, b. G. Wright.....	0	Pesbody, b. Hubbard.....	0
D. Scott, c. Winston, b. Hubbard.....	5	b. G. Wright.....	1
Blease, c. Winston, b. Hubbard.....	0	Winston, b. Hubbard.....	0
Wood, not out.....	0	b. G. Wright.....	0
Gath, b. G. Wright.....	0	b. Hubbard.....	0
Emmett, b. G. Wright.....	0	Wright, b. Hubbard.....	0
Byes, b. G. Wright.....	19	Byes, b. G. Wright.....	4
Total.....	52	Total.....	47

BOWLING ANALYSIS.

LAWRENCE—FIRST INNINGS.

Balls.	Runs.	Wickets.	Maidens.	Wides.
G. Wright.....	42	14	0	0
Dutton.....	42	2	0	0
Hubbard.....	18	5	2	1

LONGWOOD—FIRST INNINGS.

Balls.	Runs.	Wickets.	Maidens.	Wides.
G. Wright.....	58	5	7	2
Hubbard.....	51	3	7	0

LONGWOOD—SECOND INNINGS.

Balls.	Runs.	Wickets.	Maidens.	Wides.
G. Wright.....	40	2	1	5
Brice.....	102	4	8	3
D. Scott.....	24	17	0	1

GENTLEMEN vs. PLAYERS.—Played at Kennington Oval by wet and unpleasant weather July 1st and 2d, the Players winning by 35 runs. We call attention to Shaw's bowling. Score:—

PLAYERS.

Jupp, c. First Innings.....	23	c. Grace, b. Lucas.....	4
Ulyett, c. Morton, b. Lucas.....	34	c. Harris, b. Morton.....	30
Barnes, b. Morton.....	63	c. Harris, b. Morton.....	30
Leard, c. B. H. B. Strachan.....	31	c. Vernon, b. Morton.....	4
Strachan.....	31	c. Vernon, b. Lucas.....	4
Gracie, c. Tylecote, b. Morton.....	0	c. Tylecote, b. Morton.....	4
Bates, c. Grace, b. Morton.....	0	c. Sauter, b. Lucas.....	4
Emmett, c. Sauter, b. Morton.....	0	c. Sauter, b. Lucas.....	4
Scott, b. Morton.....	0	c. Tylecote, b. Morton.....	4
Lucas, c. Lucas.....	0	c. Vernon, b. Lucas.....	4
Shaw, c. Lucas, b. Morton.....	8	c. Vernon, b. Lucas.....	4
Morley, not out.....	2	c. Grace, b. Morton.....	2
Byes, b. ball.....	4	Byes, b. leg-bye.....	1
Total.....	153	Total.....	157

GENTLEMEN—SECOND INNINGS.

First Innings.		Second Innings.	
W. G. Grace, c Pilling, b Shaw	6	c and b Morley	2
A. P. Lucas, c Cates, b Shaw	7	c Morley	3
P. H. Strachan, c Jupp, b Shaw	23	c Emmett, b Shaw	3
F. Penn, c Pilling, b Bates	6	c Pilling, b Morley	4

ANALYSIS OF THE BOWLING.

PLAYERS—FIRST INNINGS.

Over.	Maidens.	Runs.	Wickets.	Wides.
Grace.....	30	21	30	0
Morton.....	30	14	50	0
Lucas.....	5-3	31	55	3
Strachan.....	16	6	26	1
Morton bowled 1 no ball.				

SECOND INNINGS.

Over.	Maidens.	Runs.	Wickets.	Wides.
Grace.....	28	10	24	4
Gracie.....	6	1	17	0
Morton.....	22	9	41	6

GENTLEMEN—FIRST INNINGS.

Over.	Maidens.	Runs.	Wickets.	Wides.
Shaw.....	38	31	17	7
Morley.....	11	13	40	0
Bates.....	11	13	29	0

SECOND INNINGS.

Over.	Maidens.	Runs.	Wickets.	Wides.
Shaw.....	31	21	34	4
Morley.....	19	0	32	3
Bates.....	9	0	32	1
Gracie.....	12	5	21	1
Barlow.....	12	5	21	1

OVER THIRTY vs. UNDER THIRTY.—The second meeting of the cricket talent of England, one side about the age of thirty, the other not having yet reached three decades, was played at Lord's, July 19th and 20th. Score:—

UNDER THIRTY.

Barnes, c. First Innings.....	2	Second Innings.....	23
Midwinter, c. Pinder, b. Grace.....	24	b. Barlow.....	11
C. St. Stud, b. Grace.....	13	b. Shaw.....	20
Barlow, b. Grace.....	13	b. Pinder, b. Emmott.....	25
Scott, b. Emmott.....	44	b. Emmott.....	25
V. Roy, run out.....	4	b. Shaw.....	20
Barnes, b. Grace.....	20	b. Grace.....	20
Gunn, b. Emmott.....	12	not out.....	0
Flowers, not out.....	8	b. Shaw.....	11
Pinder, b. Grace.....	8	b. Pinder, b. Shaw.....	11
Morley, c. Hearn, b. Shaw.....	5	c. Wild, b. Grace.....	11
Byes 4, leg-byes 3.....	0	Byes 12, leg-byes 3, w. 1, n. 1.....	17
Total.....	189	Total.....	127

OVER THIRTY.

Total.....	150	Total.....	127
OVER THIRTY.			
First Innings.		Second Innings.	
Dr. W. G. Grace, c and b Studd.....	51	b Flowers.....	49
Barnes, c and b Vernon.....	3	c Pilling, b Morley.....	49
Oscroft, c Pilling, b Studd.....	6	c and b Flowers.....	49
Lockwood, b Barnes.....	64	b Flowers.....	49
W. Hearn, c Pilling, b Studd.....	9	c Pinder, b Emmott.....	49
Emmett, b Midwinter.....	4	run out.....	2
H. S. Russell, c Scott, b Morley.....	0	c Vernon, b Morley.....	40
Schuy, c Bates, b Morley.....	2	not out.....	40
Wild, b Midwinter.....	7	run out.....	5
Pinder, c Roy, b Morley.....	13	c Morley.....	10
Shaw, not out.....	3	c Morley.....	10
Byes 9, leg-byes 5.....	13	Byes 7, leg-byes 3.....	10

ANALYSIS OF THE BOWLING.

UNDER THIRTY—FIRST INNINGS.

Over.	Maidens.	Runs.	Wickets.	Wides.
Shaw.....	52-3	37	44	2
Grace.....	50	17	52	5
Barlow.....	18	8	27	2
Emmett.....	18	8	27	2

Second Innings.				
Shaw.....	22	2	19	1
Grace.....	22	2	19	1
Emmett.....	22	2	19	1
Barlow.....	16	0	15	1
OVER THIRTY—FIRST INNINGS.				
Bates.....	8	3	17	0
Morley.....	22-1	13	19	4
Barnes.....	43	19	36	0
Studd.....	43	19	36	2
Barnes.....	17	17	15	1
Midwinter.....	17	17	15	1
Second Innings.				
Bates.....	8	3	17	0
Morley.....	22-1	13	19	4
Barnes.....	43	19	36	0
Flowers.....	43	19	36	2
Widwinter.....	17	17	15	1

Yachting and Canoeing.

—Address all communications to "Forest and Stream Publishing Company, New York."

ATLANTIC YACHT CLUB.

ANNUAL CRUISE, JULY 31ST TO AUG. 7TH.

PURSUANT to the orders of the commodore, as published in this journal, the yachts of the A. Y. C. intending to join the squadron's customary annual cruise rendezvoused at Whitestone, L. I., the day previous to the time announced for the start. The fleet mustered strong as under:—

SCHOONERS.	
Agnes, 50ft. 5in., Com. L. A. Fish.	Vision, 65ft. 9in., G. H. Seeley.
Crusader, 50ft., J. R. Maxwell.	Sunshine, 50ft., Wm. Peet.
Stella, 50ft., J. A. Thayer.	Mystic, 50ft., Am. A. Norton.

SLOOPS.	
Stella, 48ft. 5in., Vice-Com. Hug.	Genia, 43ft., T. P. Fiske.
Crusader, 50ft., J. R. Maxwell.	Sunshine, 50ft., Wm. Peet.
Vision, 65ft., G. H. Seeley.	Pine Clough, 30ft., J. G. S. G.
Comet, 50ft., J. A. Thayer.	Elephant, 50ft., F. M. Johnson.
Dolphin, 50ft., J. W. Cooper.	Hillegard, 50ft., Herman G.
Phantom, 50ft., J. G. S. G.	Riches.
Lizzie, 45ft., J. G. S. G.	Phantom, 50ft., G. T. Hotchkiss.
Pirate, 48ft., T. A. Howell.	

At a meeting of the captains the following lay out for the cruise was approved:—

At 3:30 P.M., July 31st, from Whitestone for Black Rock, Conn. Monday, Aug. 2d, 4 A.M., from Black Rock for New Bedford. Tuesday, Aug. 3d, 4 A.M., from New Bedford for Block Island. Wednesday, Aug. 4th, 4 A.M., from Block Island for New Bedford. Thursday, Aug. 5th, 10 A.M., from New Bedford for Oak Bluff or Vineyard Haven. Friday, Aug. 6th, 8 A.M., for Newport. Saturday, Aug. 7th, from Newport for Greenport.

The day after the start, the fleet was scattered during the cruise. All hands were up at the signal and in light and variable winds they were able to make good time. An anchorage was made opposite the St. George's Light, where the fleet was anchored. The crews going ashore to attend a hop given at the hotel in their honor. The fleet arrived first, beating all the schooners in spite of their earlier start. The fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals.

The fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals.

The fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals. The next day being Sunday, and the A. Y. C. boys all very "goody goody," the fleet was anchored in the harbor of St. George, Comins, Dolphin and the rest at short intervals.

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well known to New York waters. On entering Vineyard Sound, a shift of wind brought it out fresh from the northeast with a freshening tide. The fleet was not strong enough in heading up, but jolly good practice just that sort of work is. The first tussle was heard from Fantia's chain pipes as she led the crowd into the harbor. The fleet was not strong enough in heading up, but jolly good practice just that sort of work is. The first tussle was heard from Fantia's chain pipes as she led the crowd into the harbor. The fleet was not strong enough in heading up, but jolly good practice just that sort of work is. The first tussle was heard from Fantia's chain pipes as she led the crowd into the harbor.

Madcap, from Block Island, and Enterprise here joined the squadron. Stella, from New Bedford, was from at anchor, Sunshine, Browne and Mystic from Block Island. All hands put the new Casino a visit during the evening, and returned on board for an early start for Greenport, the last harbor fixed for this year's cruise. Anchors were got at 4 A.M. Aug. 7th, and the fleet took the fleet to Judith, where it fell a dead calm. A light south-westerly breeze then helped them along, and off the Little Gull the tide turned in their favor, and Greenport's pretty harbor was finally made at 8:30 P.M. The Agnes got aground near the Bumping Rocks, but came off without serious damage. Fantia was the first such in the fleet. In the fleet, the fleet was finally made at 8:30 P.M. The Agnes got aground near the Bumping Rocks, but came off without serious damage. Fantia was the first such in the fleet. In the fleet, the fleet was finally made at 8:30 P.M. The Agnes got aground near the Bumping Rocks, but came off without serious damage. Fantia was the first such in the fleet.

THE BAY REGATTA AUG. 9TH.

With the usual southwest wind of this time a year comparatively little is to be said about the racing witnessed on Monday, Aug. 9th, as it was Indian file all around the course, though the fleet did not end in a most unusual manner. The fleet was not strong enough in heading up, but jolly good practice just that sort of work is. The first tussle was heard from Fantia's chain pipes as she led the crowd into the harbor.

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ears. What will make the hair grow? Ans. Rub the bare spots with sulphur ointment, and give two drachms of sulphate of magnesia every morning.

J. E. H., New York.—Putnam's Dan was by Palmer's Dash, out of Putnam's orange and white setter bitch Nell; Nell from imported stock on both sides. We cannot give you the correct pedigree of Nask's Fan, although we are well aware the Nask stock was hard to beat a few years ago. Perhaps some of our readers can furnish this information.

F. H., Boston, Mass.—There is not very good shooting ordinarily at Point Judith, only a few yellow-legs and ring-necks about the pond. But about the last of August or 1st of September, after a northeast storm, there is often grand shooting at golden plover, black-breast plover and fute, or Esquimaux curlew, in the lots back of the Point. You will have to drive from Wakefield, we presume.

W. H. S., Tampa, Fla.—The name of the seaweed which you send is *Eucheuma isiforme*. This and many other red algae should be floated on paper from sea water, as fresh water destroys the fine color. After floating it out on paper, cover with thin muslin and press gently between several thicknesses of blotting paper, changing the blotters often, till the sea-weeds are perfectly dry. We publish full directions for collecting sea-weeds elsewhere.

A. F. J., New York. Can you give me any information in regard to trout-fishing in the Eagle and neighboring lakes and streams in the north of Maine, the facilities for reaching there, and whether quacks can be had? Can they not be reached by going from Moosehead Lake in a canoe and with carriages? Have you ever heard of anyone taking that trip? As. Troutling is good all through that country. The lakes you mention are difficult of access; many carries through swamp lands. A party of three tried it last season, but abandoned it. You would have to take Moosehead guides.

B. R. B., Houston, Texas.—The pedigree of the only Rufus II. we know of is as follows: By Rufus out of Friend. Rufus' former owner was Mr. Arnold Burges, Hillsdale, Mich. since owned by

Mr. M. Von Culin, Delaware City, Del.; breeder, Capt. Thomas Trench, Ireland, whelped April, 1873, deep red, no white; by C. S. Trench's Shot out of Capt. Trench's Linda; Linda by Hendrick's Spub II., out of Adair's Galle. Friend, owned by Mr. E. F. Stoddard, Dayton, Ohio; breeder, Rev. J. C. Leish, England; deep red, white on chest, toes and tip of stern; by Leigh's Flash, out of Kavanagh's Stella; Flash by Pat, out of Major Martin's Flash; Stella by Watson's Rollo, out of Kavanagh's Ruby. Rufus II. was a winner at the centennial.

H. H. L., Bellefonte.—You have neglected to state the age of your setter dog. It is evidently out of condition, but if you will adopt the following treatment he will, no doubt, come around all right within a short time. For a full grown dog give a teaspoonful of sulphur, followed in the morning by a dose of sulphate of magnesia, varying from a dessert to a tablespoonful. Perhaps the best way to administer this mild cathartic is to dissolve it in water and pour it down the animal's throat, omitting all food until an hour or two later. Avoid giving meat for several weeks, and exercise freely every day. Continue the sulphur and the sulphate of magnesia daily, regulating size of doses according to condition of dog. After a fair trial of a week or ten days administer two grains of quinine three times a day.

G. H. P., Boston, Mass.—Your description points to external cancer. Give dog a purgative every day for a week; two drachms of Epsom salts will probably be all that is required. His diet must be light, and without meat, and consist partly of boiled green vegetables. Carefully wash both ears with lukewarm water, and in the case of dirt or hardened wax, syringe the ears and pour in a few drops of olive oil. As the tap of the ear is probably thickened and filled with fluid between the cartilage and the gistle, cut them with a lancet and press out the bloody matter, and let them be touched with the following liniment: Take Goulard's extract of lead one ounce, glycerine and carbolic acid one quarter of an ounce, finest olive oil four and a half ounces. Mix the two first named and add the oil gently, rubbing together in a mortar. The bottle must be well shaken before the liniment is used. Write result.

J. L., North Scituate.—I have a Newfoundland pup, seven months old, that has been sick since April. He began by throwing up his food. I gave him sulphur for two or three weeks and then quinine. He suddenly became worse, and began to swell, and as I thought showed signs of peritonitis. He was subsequently treated for worms, without passing any. Should a dog be allowed to eat his food after he has thrown it up? What shall I do for him? Ans. The present symptoms point to gastritis, although you may have been correct in your first diagnosis, that he was afflicted with peritonitis, which may have coexisted. So long as vomiting continues give no solid food. Meat broths, milk gruel, etc., being proper diet. At this stage medicine is not likely to be of much avail, but would advise the administration of the sub-carbonate of bismuth, fifteen to twenty grains, three times a day. No dog should be allowed to eat the food he has vomited.

PUBLISHERS' DEPARTMENT.

THE SUMMER SOLISTICE.—One great reason why hot weather is so debilitating lies in the fact that the body is exhausted by the labors of the year. Indeed, it is natural that this should be so. In order, therefore, to resist this tendency to exhaustion, it only becomes necessary to reinvigorate the body, which can readily be done by one or two bottles of Warner's Safe Tonic. This remedy is being extensively used by physicians for this purpose, and is for sale by druggists in all parts of the world.

All orders for my patent rough glass balls hereafter should be addressed to J. Palmer O'Neil & Co., Pittsburg, Pa.

A. H. BOGARDUS.

BOGARDUS BALLS.—All orders received by us for the Bogardus patent rough ball will receive prompt attention. Hereafter these balls will be packed in barrels containing 250 balls, and will be packed as securely as possible to prevent breakage in transportation. The quality of the ball will be greatly improved. Send for prices and sample ball. J. PALMER O'NEIL & CO., Pittsburg, Pa.

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Special attention is called to HORSMAN'S SPANISH WAX-BACKED Bows and fanned peacock feathered Arrows. Send stamp for Illustrated Catalogue of Archery & Lawn Tennis.

E. I. HORSMAN, 30 & 32 William Street, New York.

Sole Agent for Brownell's Archery; See're Hook and Score Cards

ARCHER'S "DRAW AND LOOSE"

GIVES SPLENDID SATISFACTION.—A HANDLE makes the DRAW much easier. Fingers never touch the string. A HAIR THICKER, longer in the hand and smoother. THE REELIEF TO THE FINGERS and the EASE OF DRAW gives ACCURACY TO THE AIM. PRICE \$1. Liberal Discount to Clubs. See '80 or More. Send for circular. Address S. E. FRENCH, Metropolitan Hotel, N. Y. City.

TYPE-WRITER TO EXCHANGE.—Will exchange a nearly brand new TYPE-WRITER, in perfect condition, used but about four weeks, and cost \$125 cash, for its equivalent in fine hunting-bait (folding canvas, or bond iron sectional bait, preferred) and fly-rod, or other sportsman's equipments. H. B. RONEY, East Saginaw, Mich. July 22

Pittsfield, Mass. Cuts Free. Full-Length CUT in this case, \$10; LOUSE in this case, \$8. Sold everywhere by the Trade.

REGULAR, with Elastic Band.....	75	55	1.10	1.30	1.50	1.65	2.10												
BEST MOROCCO, with Leather Strap.....		2.50	3.00	3.50	4.00		5.50												
RUSSIA.....			1.00	5.00				6.00											
SHIDING into Leather Case.....				7.25	6.00														
NEW STYLE (holding 8 dozen flies at full length) with patent clips.....							2.50												
SAME, Extra quality (The "South-Side".....							2.00												
Inches long.....				4	4 1/2	5	5 1/2	6	6 1/2	7	7 1/2	8	8 1/2	9					

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Regular Quality.....\$1 75 | "The Perfection," large and fine.....\$6 00

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N. M. SHEPARD, 150 Fulton St., New York.

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FINE FISHING TACKLE. The Celebrated "Frankfort" Reels in Stock.

THE NEW FLOAT TROLLER.

Bass, 75 Cents; Pickerel, \$1.50; Muskellunge, \$1.25.

Sent by mail on receipt of price.

CUTLERY OF THE FINEST QUALITY.

The celebrated "Le Coutre" razor, in stock. Razors with safety attachments. Bowtie Knives, Hunting Clasp Knives, Stiletos, Dicks, etc.

OPTICAL GOODS.

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Babylon, 8.35 A.M., 3.35, 4.35, 5.35 P.M. Sundays, 9 A.M.

Col. Pt. & Whitestone, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35, 4.35, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.

Fishing, 6.35, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35, 4.35, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.

Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M. Rockaway Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M. and 6.35 P.M.

Great Neck, 8.35, 7.35, 11.35 A.M., 4.35, 5.35, 6.35 P.M. Saturday nights, 12.15, Sundays, 9.35 A.M., 5.35 P.M.

Garden City, Queens and Hempstead, 8, 10 A.M., 1.35, 3.35, 4.35, 5.35 P.M. From Flatbush Ave. daily, except Sunday, and from Hunter's Point, Monday, Wed., Fri. and Saturday, 12.15 night. Wednesdays and Sundays only from Flatbush Ave. 10 P.M. Sunday, 9 A.M., 7.35, 9.35 P.M.

Glen Cove, Locust Valley, Glen Head and Roslyn, 8, 10 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Sundays, 9 A.M., 6.35 P.M.

Greenport and Sag Harbor, 8 A.M., 3.35 P.M. Huntington and Northport, 8, 10 A.M., 4.35, 6.35 P.M., 6.35 P.M.

Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M. Port Jefferson, 10 A.M., 4.35 P.M. Sundays, 9 A.M., Patchogue, 8.35 A.M., 4.35, 5.35 P.M. Sundays, 9 A.M.

Richmond Hill, Glendale, 8.35, 11 A.M., 3.35, 4.35, 5.35, 6, 7 P.M. Monday, Wednesday, Friday and Saturday nights, 12.15, Sundays, 9 A.M., 6.35 P.M. Creedmoor, 8, 10 A.M., 1.35 P.M., Tuesdays, Wednesdays and Saturdays, commencing April 30.

H.C.N.E.S. P.T. & W.A.L.L. ST. A.N.N. Leave Pier 17, E.R. (Foot Pier), for Hunter's P.T., 8.30, 10.30, 11.30 A.M., 3.10, 4.10, 5.10, 6.10 P.M. For further information, tickets, connections, etc., apply at 222 R'way, cor. Barclay.

W. M. LAFFAN, Gen'l Pass. Agent.

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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

[Entered According to Act of Congress, in the year 1879, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington]

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FOREST AND STREAM

NEW YORK, THURSDAY, AUGUST 19, 1880.

THE TILESTON MEMORIAL FUND.

NEW YORK, Aug. 11h.

Editor Forest and Stream:—

I have to acknowledge the receipt to date of further subscriptions to the "Tileston Memorial Fund," as follows:—
Previously acknowledged:—
C. P. McMurdy..... \$5 00
C. T. Fauntleroy, North-
comb, Highampton,
A. Selden Friend..... 20 00
Geo. F. Osgood, 55; S. D.
Moore, Toledo..... 5 00
Crafts, St., through G.
A. Hammersley, through
G. Barker..... 2 00
Geo. G. Barker..... 0 01
H. C. Glover..... 5 00
Total..... \$650 00

We have received from Mr. P. C. Ohi the promised oil painting of an English snipe, suitably framed, which is a fine work of art, and the same will be disposed of for the benefit of the fund at the next regular meeting (in September) of the Eastern Field Trials Club.

FRED. N. HALL, Secretary.
We have received and transmitted to Mr. Hall \$5 for the fund, from Mr. A. S. Smith, New York City.

DR. RUTH.—Dr. Ruth, the California rifle expert, will give an exhibition at the Brooklyn Driving Park, Parkville, L. I., next Saturday afternoon at 3 o'clock. His wife will be present, and will exhibit her skill with rifle and pistol. The shooting will be at glass balls, and if Dr. Ruth performs the feat he has had the credit of accomplishing on the Pacific Coast, the entertainment next Saturday will be well worth witnessing.

—By a very curious coincidence we publish to-day "Bodines'" note on the mother woodcock, which shams lameness, and another account of the same trick of the duck, the latter written three hundred years ago. The chapters of the book "Of English Dogges" to-day contain much that is novel; but much of these old descriptions would answer very well for the present if put into modern English.

THE NEW YORK FISH COMMISSION.

A MEETING of the New York Commission was held in the city last week, and the subject of the salt water fisheries came up for discussion. These have never received much attention, if any, from the Commission, although New York has in Long Island a fine stretch of coast, interspersed with magnificent bays, where not only are tons of fishes taken by professional fishermen to supply the great markets, but is a favorite resort for anglers, who take great quantities of bluefish, weakfish and others, which are partly consumed in the hotels, and the remainder find a market in New York, for the angler pays his boatman by the day, and usually gives him all the fish, and there are probably five hundred men in the towns about Great South Bay alone who live entirely during the summer season by taking parties of anglers out to fish, thus earning from four to five dollars per day, the usual price for a three to five ton catboat and man, while the fish caught will bring about as much more in many cases. There is no fresh water angling within the waters of the State to compare to it, and it is a question if the commercial fisheries of Long Island do not equal in value those of the rest of the State. Of course no correct estimate of such value can be made until the returns from the experts of the United States Fish Commission, who are collecting statistics in connection with the census of 1880, are all in.

At this last meeting Messrs. Roosevelt and Blackford were appointed a committee to investigate this subject, and report at the next one the propriety of establishing a station for observation on the habits of valuable sea fishes, and perhaps propagate them. The time has come when this should be done. Fish culture has broadened its field, and no longer confines itself to the salmonide or to stocking inland lakes and ponds with bass and "bull-heads." The sea is the great feeder of mankind, and the possibility of its being made to produce more of certain favorite kinds is now being rapidly demonstrated, and the New York Fish Commission is awake to the fact, but, alas! just as they are about to move in this matter their appropriation is cut down and they are powerless.

If ever the State appropriated money for the future benefit of the people, it was in the small amount given for fish culture, whereby the people obtained cheap and wholesome food from sources which were otherwise unproductive, evidence of which can be obtained from many portions of the State.

The bluefish (*Pomatomus saltatrix*), seems to hold its own, but most of the other valuable food fishes have decreased in numbers within the past twenty years. Perhaps this is on account of increased fishing; if so, there has been also an increase of population demanding food, and the way to increase the fishes is not to stop or prevent fishing and wait, in old fogy fashion, for them to increase themselves, but to hatch them by the million or the hundred of millions, and destroy the sharks and other enemies. If our net fishermen could be induced to kill sharks, sculpins, toad fishes, etc., instead of lifting the net and getting rid of them in the easiest manner, one good point would be gained and the fishermen and fish commissioners would work in harmony as soon as the former learn that their interests are identical.

A VALUED COADJUTOR.—It is satisfactory to notice that *Land and Water* very heartily supports the position taken by FOREST AND STREAM on the subject of summer woodcock shooting. The writer of the article alluded to, after quoting from our recent article on this topic, states that he has "seen young woodcock in more than one of the markets of the Eastern States in July not more than half fledged." The truth is, that the season for woodcock should not open much, if any, before Oct. 1st, and the sooner this fact is recognized by sportsmen of the better class, the sooner the reform which we all desire will come about.

—Mr. Jerome Marble starts from Worcester, Mass., Sept. 3d, in the sportsman's palace car, the City of Worcester, for a short trip in the Northwest.

IT IS THE CAT.

FEW people, we imagine, realize how full of vicissitudes and perils is the life of our upland game birds. Take, for example, one of those quail hatched not a hundred rods from your doorstep and reared on your own farm, whose parents you heard whistling on the fence, or the old rocky knoll, every day through the spring and summer—have you ever thought how many enemies that little thing had to contend with, and how small was the chance that it would ever attain its full size, and spring from before the dogs in November a full fledged bird? From the time that it struggles out of the shell till the hour when, struck by the leaden hail, it turns over to the shot and is pocketed by the satisfied shooter, its life has been one of constant watchfulness, one long series of efforts to escape from constantly impending perils.

The egg from which it is to emerge has been deposited. The parent birds have not been destroyed by the deep drifts of the previous winter, nor have they fallen a prey to the small boy and the pot hunter, who, when the weather is favorable for such nefarious practices, track the innocent birds over the light snows, and shoot them when huddled. The nest is prepared and the eggs are laid. Now, other dangers threaten. If the mother is killed; if by heavy rain storms the nest is flooded; if the prowling skunk or the thievish crow discovers its location, the life of our young quail will be a short and not a particularly merry one; he will never see the daylight.

Let us suppose him happily hatched, however. He starts forth with his brothers and sisters on his journey through life. The chances are ten to one that before three weeks have passed he will have been picked up by a hawk, or carried off some evening, just at dusk, by a soft winged owl, or captured as he passes some old pile of stones, by a weasel, or casually gobbled up by a fox while passing through the swamp. If he escapes all these dangers, if the weather during his days of extreme juvenility is warm and dry, so that he gets a fair start and plenty of strength before cold, harsh rains come to chill his small body and make him an easy prey to disease; if the larvae of the partridge fly do not fasten on his poor little head and suck away his very life blood; if none of these things happen—and all or any of them are likely to come about—our quail has a reasonably fair chance of living for six or seven months, and finally being brought to bag in the approved and legitimate way. From a quail's point of view, however, his lot is not a happy one.

We have enumerated a few of the dangers to which some of our upland game birds are subjected, and which it is the sportsman's duty to diminish as far as in him lies. Bounties on hawks, owls, skunks and foxes, offered by gun clubs and game protective associations, would do much to lessen the number of these vermin, and, hence, to increase the birds in any district. Of all our hawks the common marsh harrier is one of the most persistent and successful destroyers of quail, and one of them will more than decimate a growing brood. All the animals mentioned, with the exception of the fox, may be readily destroyed either by the gun or trap, and a little well directed effort to this end would, we think, soon be repaid by the improvement in the shooting. But there is one enemy to bird life to which we have not yet alluded, although, in our opinion, it is no less destructive than all the others which we have mentioned. An enemy that hunts indifferently by night or day, in the deepest woods or in the orchard close to the house; a creature that does more to deplete the covey of quail, to destroy the woodcock, both old and young, and kills more insectivorous birds than all the hawks in a district; an animal that is the pet of the children and the favorite of the housewife, "What!" says some horrified reader, "you don't mean the—?" Yes we do. IT IS THE CAT.

A cat that lives in the house or in the stables and only makes occasional stolen visits to the woods and fields is bad enough, and destroys no small amount of bird life. We have seen such a cat—one that spent all its days ly-

ing under the stove, or in the warm sun, one that had such a virtuous and innocent countenance that you would have trusted it with untold pitchers of cream—we have seen such a cat, we say, start quietly out just at dusk, and return to the kitchen in less than ten minutes with a dying woodcock in its mouth. From the stomach of another similar feline Pecksniff we have taken the larger part of an adult quail.

But house cats that only hunt occasionally are saints and martyrs compared with the domestic cat run wild, or with the utterly irreclaimable descendants of these wild tame cats. Such animals have to depend solely on their own exertions for a living. With them hunting is a business as well as a pleasure. They are veritable pot hunters.

The English keeper well understands the injury done in the preserves by the domestic cat, and wages against it a war as bitter, and as uncompromising as that which he carries on against its short-tailed wild cousin, or against the stoat, or any of the hawks. A similar crusade should be inaugurated in this country by all who are interested in the preservation of our game birds.

The hunting grounds of the cat cover all the localities frequented by our feathered game. You may start them as well from the swamp where the cock are to be found, as from the hedges that border the rye stubble through which, at morning and evening, the quail wander. We have come upon them peacefully reposing in the alder runs that we were working out late in the season for ruffed grouse, and have surprised them on the borders of the snipe grounds, at their meal on a green-winged teal or a rail.

Nowhere can they be found in more abundance than in the Central Park. Any one who may ride at dusk along the west side drive or bridle path will see Thomas and Tabitha, with all their relations, starting out on the war path. The rabbits and the many birds in the Park furnish them with a fat subsistence. Let us hope that Mr. Bergh's proposed anti-cat ordinance may abate this nuisance before long.

There is one way, and, so far as we know, only one, of curing a hunting cat's infondness for what some of our contemporaries call the "noble art of venerie," and we hope that, during the next season, all of our readers who may have the opportunity will give it a thorough trial. The rule is one which we invariably practice ourselves, and usually with the best results. It is this: when you see a cat while out shooting, approach it as closely as possible, aim your gun at the shoulders or back and pull both triggers.

It is time that the sportsmen of our country, and especially of the thickly settled East where cats do most abound, took some active steps to protect the birds from this enemy, the most destructive, after man, with which they have to contend. We are sure that, could the quail, the woodcock and the ruffed grouse speak, they would, if questioned as to the enemy of which they stand most in fear, reply in accents of horror and alarm:—

"It is, it is the cat!"

And the great army of insectivorous birds, the friends of the farmer, the sweet-voiced warblers that cheer us through the spring and summer by their songs, and beautify our homes by their brilliant plumage, would take up the sad refrain, and, in tones whose pathos and earnestness could not fail to arouse the sympathy of every kindly heart, unite in uttering the confirmatory, the condemnatory, the now classic words:—

"They're right; it is the cat."

BREEDING QUAIL IN CONFINEMENT.—The experiment, so often tried, of rearing quail in captivity has never been thoroughly successful. The very few instances on record where quail have been hatched and reared in the cage are only enough to show that it may possibly occur in exceptional cases. We have often had quail lay in confinement, but never set.

It is said that Mr. Henry Benbrook, a game dealer in Raritan, N. J., succeeded in rearing six quail last year which had furnished him up to July 31st with 105 eggs. Some of these were placed under a bantam hen, and six young were hatched, which are alive and doing well.

The history of Mr. Benbrook's experiment is as follows: Four years ago he captured two quail and kept them in confinement. The first year the female laid twenty-four eggs, but declined to incubate; the second year was unproductive, but the third the female laid twelve eggs, and after setting for some time died. The male then took her place and brought off six young, which, as has been said, lived and are laying this season.

The further results of Mr. Benbrook's quail culture will be looked for with interest.

NEBRASKA FIELD TRIALS.—The Nebraska State Sportsmen's Association propose to hold a series of field trials at their next annual convention at Milford, Neb., Sept. 30th, Oct. 1st and 2d. We are glad to see these trials multiplying.

—Among our contributors this week "Nessmuk" finds, in the pappoose, a subject for an altogether original study of Indian life, and "Bodines" continues his readable "Camp Notes."

THE AMERICAN-CANADIAN MATCH.

THE American victory over the Canadian team at Creedmoor, last Saturday, was not an unexpected event to either of the two teams. The visitors hoped rather than anticipated a victory, and that they had really made intelligent preparation is evident in the averages of 296 reached by them. In the long series of international matches there has never been one with less preliminary pother. It was a quiet, simply conducted display of fine shooting, such as American rifles and American riflemen are capable of making every day. Of course all this excellence, which seems to be so easily accomplished, really means a vast deal of preparation. To take a glance at the flags which flutter about on the staffs, judge from their motion the force and direction of the wind which is affecting them, and then express that force in turns of the vernier sight and windage screws, seems to be a very easy performance: but the ability to do so was only won by the gentlemen at Creedmoor last Saturday by days and weeks of practice on the ground. Thousands of bullets were sent spinning down the range, the performance of each carefully noted, and then, from these data, the rules drawn, the conclusions reached, which enabled such good results on Saturday last.

The match was a novelty in being without a referee. Each team intended to do its best fairly and honestly, and expected the other to do the same, and with this spirit prevailing an officer of supervision was a mere superfluous.

The Canadians went home with that measure of satisfaction which comes of a good deed gallantly performed. They had missed success, but they had deserved it, and, were the conditions of the Elcho Shield contests such as to admit a Canadian team, that trophy would no doubt soon take a transatlantic trip. They go back to the Dominion with the right, well earned, of being considered worthy antagonists of the Creedmoor shooters, and richly deserve the courtesy of a return match on their own grounds next year with their foes of last Saturday. It certainly does begin to look as though the prestige of American victory, which has now been held for six years, was to be broken by a Canadian team. They have that pluck which carries them through one defeat on to the next charge, and almost equal our friends the Irish marksmen for the vigor and determination of their bids for championship over the Americans.

The scores are worth study. On the Canadian side it will be seen that the shooting is well bunched, and that but a half dozen points separate the highest and lowest scores. On the American side the work is more straggling, but still there is no extensive gap seen. The marksmen there are not placed as one would suppose from their previous practice, but the secret is told in the report of the match, which attributes the high position of Mr. Waters to his implicit reliance on the judgment of his coach. Of course that gentleman is capable of making a creditable showing in individual shooting, but there is a certain element of strength in the advice and counsel of a good coach, and this was added in this case, giving the first place in the match. The valuable coach sits at the scene of action, and becomes, as it were, the reservoir of the experience of each shot, and from this fund of information properly digested the next member of the squad may draw. If he fails to do so, it is to his loss, and in the team of the future, when even more than now victory may depend on a single shot and its result, the office of the coach will be magnified, and the value of an efficient assistant in that position be duly recognized.

THE WIMBLEDON MARKING SCANDAL.—The developments at the late meeting of the British N. R. A., touching false marking, should be carefully coined by the managers of our Creedmoor meetings. It is the simplest thing in the world to secure a perfect system of checks in the signalling of shots, while, at the same time, the marking could be prompt as now, with the record as effective in all respects. The target of to-day is far from being sensible in theory or practice, and there is an opportunity for some clever inventor to bring into existence the target of the future, which shall tell each rifleman instantly on the delivery of his shot precisely where it has struck and its value in a system perhaps less arbitrary than the present, and more discriminating without becoming more clumsy. It is not an inviting commentary upon the standing of the troop of the British Army to see them stooping to the taking of bribes in the fashion hinted at, and the very safe inference that 1890 has not seen the opening of the deceitful system only makes the scandal the greater, as it seems to throw doubt upon the performances of former years. There is need of more exactness when records are making on the rifle field, and some of the clubs over the country are far from paying much attention to form and order in the making up of scores. So derelict are some that their reports of practice bear strong traces of the amendatory pencil at the shooting stand.

DELAWARE GAME PROTECTION.—The heads of 1,769 hawks were returned to the Somerset Commissioners, at a cost to the county of \$884.50.

THE ANTHRACITE'S FAILURE.

THE most successful case of misrepresentation through the innocent instrumentality of the press which has ever come under our notice is that of the reputed economy in consumption of fuel of the Perkins system, or rather his adaptation of the pipe boiler and his special engine. It seems high time that the public were set right in this matter before they are wheeled into taking stock or investing in any "rights" for American territory.

Everybody reads FOREST AND STREAM. Major Deane, the secretary and agent of the Perkins Stom Engine Company, reads it, and the company itself anxiously looks for its arrival every week. After waiting patiently for an explanation from Major Deane relative to his astonishing want of familiarity with engineering as displayed in a letter of his to a reputable manufacturing concern recently, the Major cannot blame us for assuming him to be altogether a novice in such matters, and therefore incapable of explaining away the serious blunder which has gone on record against him. We did not insist upon an answer appearing in this journal, and would have been perfectly satisfied had he seen fit to address his communication to any other publication, barring, of course, sundry infinitesimal sheets which are not generally recognized as fit mediums through which to discuss such important questions as the economy of fuel consumption. But the Major has remained silent, and it will now be our turn to speak and to place before the public some very unpalatable facts concerning the very peculiar management of the Perkins monomania in America.

From the departure of the Anthracite from England up to date, her affairs have been conducted in a manner at once ludicrous and wide of the truth, whether known or unknown to the persons in charge. Ludicrous, because the Perkins Engine Company seems to have regarded the American people and their engineers as so many Zulus, capable of being readily reduced to the desired state of gullibility by the romancing of persons entirely unfit to speak intelligently upon the subject of her mission, leaving the source of information in no better hands than those of a hired fireman and a garrulous old Scotch engine driver. Wide of the truth, because Major Deane has exhibited photographs of yachts and ferryboats as examples of vessels using the Perkins arrangement, when every engineer in America is aware of the fact that both engines and boilers of those vessels have long ago been discarded and consigned to the scrap heap and spherical boilers with the usual type of compounds substituted. And further, wide of the truth, because Major Deane has gravely expressed his confidence in some trials recently made at the Brooklyn Navy Yard, "because thorough experiments had been carried out on her in England with the result claimed of one horse power per hour per pound of coal burnt." And yet the results of the English trial have only been figured up a few weeks since, the accounts of the trial spread broadcast over here being purely assumptions, which the report to hand does not bear out, which it in fact directly disproves.

The vainglorious assertion about "creating a revolution in engineering" is clap-trap pure and simple, for, as we will show, the boiler and engine of the Anthracite turn out to be not a whit more economical than the practice noted aboard any first-class ocean steamer when tried under (qually favorable conditions. We do not wish to convey the idea that Major Deane wilfully circulated what he did not believe himself; there is no reason whatever to question his perfect good faith, but we hold that he has fallen a victim to the windy tales of those about him. The fact remains that these stories were allowed to pass into print, and that the press has become the innocent means of disseminating misleading news through the failure of the Perkins Company or its agents to contradict what some of them must know to be false and an imposition. The whole thing smacks strongly of an advertising dodge, and shows that it is still an easy matter to gull the lay press, providing the romancing be brazen enough to partake of the sensational. In view of the facts herein contained, many esteemed but too gushy contemporaries will have some trouble in "craw-fishing out o' de hole," and "crow" ought to be their prevailing foul until the visit of the Anthracite shall have been forgotten, and her hideous outline faded from public memory.

The Perkins Company made a grave mistake in sending out persons in its interests who are not engineers, and those persons made another grave mistake in seeking counsel and championship at the hands of ignorant individuals whose names are born on prison books, in place of directing themselves to sources more reputable and more capable. The Perkins boiler will never be adopted in America; it will not even be introduced; it is not worth it. As for the Perkins engine, we cannot bring ourselves to speak of it in serious language.

Concerning the recent trial at the Brooklyn Navy Yard, the wordy versions of success are empty of facts, and have no other foundation than a reporter's imaginative brain. Nothing has yet been determined, only

a number of indicator cards have been taken. That a pressure of 300 to 500 pounds steam could be carried in the Anthracite's boiler, or in any other pipe boiler built for such pressures, is not a point at issue at all, is nothing new and not worth recording. The trials in England have been shamefully falsified to affect the public here, and we protest against any similar tactics being countenanced on this side of the Atlantic through the inability of the non-professional press to deal with matters which are beyond it.

In order that we may not be accused of prejudice, we prefer to give the investigation of an English journal, the standing of which is as well known to us in America as it is to the fraternity in Europe. We quote from the *London Engineer*, July 30th, which bears us out with data and facts in all we have said concerning the Perkins hobby. It also gives color to the prevailing impression that the Anthracite shirked a test with the steamer *Leila* for causes much more rational than the foolish and untenable reason assigned by the company's agent in his unfortunate answer. The *Engineer* has it as follows:—

We have been favored with a copy of his report, which, for some inexplicable reason, is very incomplete; in fact, any assistant engineer could have produced one as satisfactory. It will be borne in mind that for a great many years Mr. Perkins has earnestly advocated the use of very high pressure steam and large measures of expansion; and that he has stated and argued that in this way, and in this way only, can any great economy of fuel be obtained. It has been urged, on the other hand, that Mr. Perkins never had a proper test of one of his engines made; or that such a test had been carried out that the result had not been published; that the engine was complex, and unsuited for use at sea; and that sound theory, read in the light of the best practice, was dead against Mr. Perkins. We may add to this that all Mr. Perkins' ventures at sea have been singularly unfortunate. The engines of the yacht *Wanderer*, which were intended once for all to establish the success of the Perkins system, broke down, caused much trouble, and were finally condemned and removed. The engines of the *Loftus Perkins*, to which we referred above, have, it is said, gone to the scrap heap after a few months' service, during which, it is currently reported in Sunderland, that more time was spent in the making of repairs than in the running of trips. Almost the only comment made by Mr. Bramwell is to the effect that the engines ran for ten hours without requiring the use of a hammer or a spanner, which Mr. Bramwell seems to consider a remarkable performance; but whether remarkable only for the Perkins engine or for any engine we cannot say. Sea-going engineers will hardly look on it as an exceptional feat. Mr. Bramwell made no attempt to determine the evaporative efficiency of the boiler. He contented himself with taking 123 diagrams, and weighing the coal; 15 cwt. were burned in all. The engines gave out from 730 A.M. to 630 P.M., eleven hours and ten minutes, a gross average indicated horse power of 80.55, but from 630 to 723, when the engines stopped of themselves, because the fire had burned itself out, the power was gradually diminishing. The average full power revolutions were 133.75 per minute. The average consumption of fuel per horse power per hour was 1.7 pounds, including that used in getting up steam. "From that time," writes Mr. Bramwell, "when the first shovelful of the fourth sack of coal was put on the fire, namely, at 753 A.M., to the time when the first shovelful of the fifteenth sack of coals was put on the fire, namely, 4.15 P.M., i. e., eight hours fifty-five minutes, the engines exerted an average of 80.2 horse power. This gives the consumption per horse power per hour at 1.7 pounds, assuming the fire was uniform at the commencement and end of these times."...

In the first place, the power developed was sufficiently great to make the experiment a satisfactory test of the Perkins system. The cylinders were jacketed, and there were no leaks, and the boiler was so efficiently clothed that a thermometer laid on the lagging and covered with cotton wool only rose to 138 degs. Fahr. It is improbable, therefore, that any better result could be got from a larger engine. Next it is to be observed that the fuel economy of the trial was "Nixon's" navigation hand-picked lumps, which is probably the best coal for the Perkins system. Experiments carried out at it at Reyham yard in 1875 showed that it evaporated, when burnt properly, at the rate of 11.05 pounds of water from 212 degs., while the best Newcastle coal in the same boiler evaporated but 9.31 pounds. It is a curious fact that Mr. Bramwell, in his report, nowhere states the temperature of the feed-water. We may assume, however, that it was the same as that of the condenser. The vacuum was 27 inches. The height of the barometer is not stated. Taking it at a little under 30 inches, we have 115 degs. as the temperature of the feed-water. We have no reason to doubt each pound of coal burned represented 11 pounds of steam. This being so, the engine consumed 157 pounds, or say, in round numbers, 19 pounds of steam per horse-power per hour. Now, it may be regarded as clearly proved that ordinary compound engines working on north country coal require but 1.9 pounds to 2 pounds of coal per horse power per hour. Making allowance for the difference of the qualities of the boilers and of the coal, we may say that this represents 19 pounds to 21 pounds of steam per horse power per hour; or to all intents and purposes the engines of an ordinary Atlantic cargo steamer, indicating from 300 to 600 horse power, are as economical as the Perkins engine. We are dealing here with facts. We are making no assumptions. The consumption of steam in the engines of the Anthracite was more likely to have been greater than we have stated than less. Indeed, we believe that Mr. Perkins claims that his boiler can evaporate with the best Welsh coal, and feed-water at 120 degs., nearly 12 pounds of water per pound of coal. This would make the consumption of steam 20 pounds per horse power hour.... Comparing the performance of the engines of the Anthracite with those of ordinary compound engines by good makers, we find that nothing has been gained by the adoption of a high boiler pressure. We say boiler pressure, for, curiously enough, Mr. Perkins does not really work with steam of enormous tension, however much he may advocate it. Thus, while the boiler pressure in the case of the Anthracite was 260 pounds on the square inch, the pressure in the first cylinder did not exceed 180 pounds, or just one-half that in the boiler. We are entirely at a loss to explain what object is gained by carrying 300 pounds in a boiler and working at 180 pounds. Nor does Mr. Bramwell throw the least light on the subject. Indeed, there are many points of much interest left totally untouched in this curiously incomplete report. Thus, we should have liked to know how much steam was condensed in the coiled pipes which act as jackets to the cylinders. Again, we are told nothing about the temperature of the sea or that of the feed-water; and, as we

have said, no attempt was made to measure the feed-water. We reproduce copies of three of the diagrams—that is to say, as it will be seen that while the first two diagrams are good and satisfactory, the last two are very much the reverse. The diagrams are all alike, right through the series, and we have no doubt that the jump at the beginning and the wave line are due to condensed steam. The engines, during the trial, expanded steam thirty two times, and under any possible conditions, unless the steam is very highly super-heated indeed, that ratio of expansion must be attended with enormous condensation. The piecing of the two first diagrams is fairly good, but that of either of the other diagrams with the second is very bad....

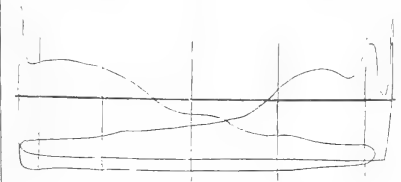
We, and many others with us, would like to be told why the cylinder pressure was but one-half the boiler pressure. One hundred and sixty pounds is by no means unknown in locomotive practice, and it very high pressures are good, why does not Mr. Perkins use them? It may be of course that he considers an expansion of thirty-two to one enough, and that if he sent 300 pounds of steam into his engines he would have to expand it too much. Conceding the force of the argument, the question remains, Why does he carry 300 pounds in his boiler? If it conduces to economy, the fact ought to be generally known. It will be a new fact to most engineers.

We should say so.

When Mr. Perkins was content with two cylinders, he obtained one horse power from 1.6 pounds. When he added a third cylinder, "to do away with a gland," the best his arrangement could do with the best of coal was 1.7 pounds, which is not calculated to inspire faith in the claim of the Perkins Engine Company to teach the world anything new. The reader will probably conclude with us, that the advantages claimed for the Perkins system are a myth, and that trying to place it on the American market at this late day seems little less than grotesque. We subjoin the diagrams referred to:—



Steam, 35 lbs.; chamber, 9 lbs.; vacuum, 24 ins.; revolutions, 123.75 per minute. For the high pressure cylinder, the average = 129.75 lbs.; for the intermediate cylinder, the average = 15.72 lbs. For the high pressure cylinder we have 3,566 revolutions $X .00146 X 123.75 = 28,215.227$ foot lbs. For the intermediate cylinder we have 3.8 revolutions $X 238.65 X 15.8 = 14,740.700$ foot lbs. The first diagram is from the top of the high pressure initial cylinder, the second from the bottom of the second cylinder. The remaining two are from the top and bottom of the third cylinder, as follows:—



Average for low pressure cylinder, bottom = 10.47 lbs., and for the top = 8.153 lbs. We have, therefore, for the bottom 3,566 revolutions $X .00146 X 10.47 = 20,375.690$ foot lbs., and for the top 3,800 revolutions $X .00146 X 8.153 = 14,740.700$ foot lbs. Total foot lbs. = 35,116.390. All the diagrams are calculated with the planimeter. The last pair were, however, very unsatisfactory and difficult to deal with, the wavy curve line being apparently due to the presence of water in the cylinder.

The Sportsman Tourist.

ROUGH NOTES FROM THE WOODS.

Second Paper.

BY NESSMUCK.

FOUR miles from Moose River, on the "Brown Tract road," there is a trail turning to the right, and a white shingle is marked "Jones' Camp." Follow the trail two miles, and it forks. The left fork is marked again "Jones' Camp." The right fork has a plain shingle, marked with blue pencil, as follows: "Wm. Bero, Chief St. Regis Indians." This trail leads to the "Injun Camp," as it is called here. I had met Chief William at the Moose River House: had been told that he could give me more genuine knowledge of the wilderness than any man within fifty miles. I laid myself out to cultivate Chief William, invited him to my room, showed him rifle, hatchet, fishing duffle, hooks, spears, lines and knives. When I showed him an ivory-handled Spanish knife that was really fine, though of little use to me, I saw his black eye gleam; he fell in love with that knife on sight. I am well used to the American aborigine. When William had done admiring that knife I made him a present of it. That won him. I am sorry to say I supplemented the gift with a glass of firewater. A cordial invitation to visit the Indian camp followed, with an offer to carry my canoe and all the traps I desired to take.

William Bero, chief of the St. Regis tribe, heads a gang of twenty young braves, whose tomahawk is the axe of the backwoodsman, whose scalping knife is the spud of the barkpeeler. Luckily, in going in, I met William on the trail, who, with a companion, was going into the tannery on business.

He went no further. He had promised if I came out to his camp that he would "take care of me," and he did it.

Relegating his business to his partner on the spot, he left me in a blanket roll and rade away from me. He even insisted on carrying my nine-ounce roll. From the moment I met him on the trail he took possession of me, so to speak, and I followed his lead implicitly.

What a grand woodsman the fellow is! I wanted to go to the Indian camp the first thing. Not a bit of it. He knew of a spring hole that he wanted me to fish, and I surrendered. He led me by trails and across swamps, until I lost all notion of compass points, and at last brought me out on the banks of the Moose, at the mouth of a cold trout stream, and then he explained that trout had been taken there the present season weighing over three pounds. I dare say he was right. But as they had been taken, of course they were not there.

I whipped the water in my best style for half an hour without a rise, while Chief William, with tamarack pole, coarse cotton line and large bass hook, baited with a chunk of shiner, stood on a log below me and hauled out trout after trout in the most business-like and unartistic manner.

At last an unfortunate took my center fly—a queen—and, as I was towing him around, another victim immolated himself on the tail fly—a Romeyn. It was well. With what trout Chief Bill had snaked out we had enough, but it is hard to make any man here believe that you come to the woods for any other purpose than to catch the ultimate trout and shoot the last possible deer. I succeeded in drawing Bill off, and we started for the "Indian camp." He said it was "nearly half." I did not know it. It took an hour and a half of rapid wading to reach it. The camp was simply two bark-roofed log shanties, standing among and underneath large spruce and hemlock trees.

One of the whirlwinds so common in these woods would make a bad tangle of that camp.

The inmates of the shanty consisted of the fifteen choppers and peelers, with Bill's family of seven—Mrs. Bill, a portly, comely squaw; the daughter, a pretty-featured, plump young squaw, with a voice like a silver bell, and four young Indians, the smallest being the inevitable pappoose, on his ornately carved and painted board.

That pappoose is and has been a mystery to me. I think the first made his acquaintance many years ago among the Nessmucks of Massachusetts. He was on his board, swathed, strapped and swaddled from chin to toes, immovable save that his head and neck were left free to wiggle. I next saw him among the Senecas of New York State. Then in Michigan; in Wisconsin; on the upper waters of the Mississippi; and now I meet him again in the North Woods. The same mysterious inscrutable eyes; the same placid, patient, silent lay, varying in nothing save the board, which in Wisconsin was simply a piece of bark. In this case the board is a neat bit of handicraft. When Bill assures me that the carving was "done with a jackknife" I can hardly believe him. And when he says that the bright vermilion, blue and yellow has not been retouched in thirty-five years. I don't believe him at all. The painting is as bright as though it was put on the present season. Commend me to the pappoose board. We judge men, actions and things by ultimate results.

After a royal supper of trout, cooked in a manner worthy of Delmonico's, I watched Bill's young barkpeelers as they got ready around a rousing fire which they had the good sense to build under a huge hemlock. There was not a pair of round shoulders or a protruding shoulder-blad to be seen. Straight, strong, stalwart fellows, one and all. And every man of them spent the first year of his life on a pappoose board.

It has been said a thousand times that Indians will not work, or only in a fitful, desultory way that amounts to nothing; and this is true of the plains Indian and of the Cree and Chippewa, with other nomadic tribes; but not of the St. Regis or Mohawk, and only in part of the Senecas and Oneidas.

As an instance of what Indian muscle can do, let me state that the day before I reached the St. Regis camp ten of Bill's barkpeelers felled and peeled 138 large hemlocks, yielding over thirty cords of bark. In most white camps a cord of bark per day is accounted fair work.

I think the pappoose is glad when darkness settles down on the forest and they let up on him. He throws his arms and legs about for all the world like a white baby, and crows like mad; then of a sudden he goes mad, and he is asleep. I, too, turn in, but not to sleep. Three of the young Indians, including the sweet-voiced maiden, gather around the fire and sing in a low minor key, and with soft, pleasant voices, the Indian songs of their tribe. And at last I drop into slumber, and waken five minutes after, as it seems to me. But it is daylight, and Mrs. Bill has the breakfast nearly ready. I have slept the sleep of the just man, and am fresh for the day.

The maiden has got that inscrutable pappoose out, and is strapping him to his board for the day. When they get him fixed they will pull out from under the roots of a huge hemlock the inevitable jug of tar oil, and amount every visible part of his tawny pelt. The tar oil, well applied, will last some two hours, when it begins to fall, and venomous insects begin to wire in on you.

That pappoose understands it. So long as "tar oil" lasts he spends his time peering with deep, curious eyes into the gloomy depths of the forest, or, when the wind rises, watching the swaying tree tops. But at the first decided mosquito or punkie bite he gives tongue in a straight, steady yell, and then, without any up or downs, and Mrs. Bill comes to his relief, takes him between her knees, anoints him from neck to crown, takes him by the basket handle of his board, as one might a peck of potatoes, and stands him up against a hemlock, a log, or the shady side of the shanty. He resumes his eternal occupation of gazing at the mysteries of the forest, and is placidly content.

An Indian baby is not expensive in the way of playthings.

William gives me no rest. It is his unyielding conviction that I came to the woods for the sole purpose of shooting deer and catching trout, and I have got to do it. He hurries me off to Nelson Lake, one of the unmaped waters of the wilderness. There are three spring holes there, in which trout of two pounds have been taken the present season. It is also a good lake for "floating," as they call it here. A short time since a party went on the lake to float, and succeeded, by noisy paddling, in scaring six deer out of the lake in one evening, but got no shot. I find Nelson Lake a pretty sheet of water, fringed

with the fragrant pond lily that is almost universal here. Bill lays me up to the first spring hole without noise or wake, and I cast my flies across the clear, cold water in vain. Chubs and shiners rush madly on the hooks, but trout will not rise. Bill takes a shapeless piece of chub, puts it on that hook of his, and presently drags out a pound trout. To my disgust, he is putting it mildly. I am swearing mad. He explains that there is a late in July and early in August when trout "lay deep" and will not rise to fly. "If we had wum," says Bill, "we catch 'em." That is just my idea, and it happens that I have the "wums." Brought them with me, knowing they were not to be had in the forest. While he is paddling to the next spring hole I take off my leader and replace it with a large hook and strong snell, bait it heavily, and make a cast. The trout glides slowly into my reach. It is taken on the first cast, and I bring a half-pound fish into the boat with small ceremony. Bill catches, as usual, a larger one, and then I stubbornly refuse to make another cast. He does not understand it at all, but paddles to the landing and I walk up to camp, scrape acquaintance with his daughter, who is educated, intelligent and a school teacher among the St. Regis, speaking and writing English fluently. She showed me specimens of chirography and was pleased when I praised her handwriting, which was really fine. Then I took the purpose by his basket handle and carried him off into the woods. I stood him up against a spruce and made him a speech in mixed Chippewa, Portuguese and English. I explained to him the brutal manner in which his ancestors had roasted and scalped my forefathers and forefathers. I handed him a big knife about his baby head, sang a snatch of Chippewa war song and gave him the war whoop. A white baby would have gone into convulsions. He looked at me calmly with those dark, fathomless eyes, and when I gave a final whoop, broke into a placid smile that covered his face all over like a burst of sunlight.

An Indian baby doesn't scare much.

After a dinner of trout—again—Bill left me in peace, while he went to look after a job somewhere among the hills, and I took my blanket, hunted out a dry, cozy nook, rolled myself up and was having a grand snooze when I was awakened by some one calling my name. It was ye Chief Bill, and I knew he meant business. He is bound that I shall have sport, if it kills me. We are to fish that spring hole again, which I don't care for, and then watch a deer lick, which I do care for. He straps on that everlasting pack-bag, gets on his shooting gear, and leaves off at the spring hole. I am sorry to see that same spot I fished the night before. I am sorry to see that Bill's shooting-iron is a veritable old musket of the Continental pattern, from which two of the three bands have been abstracted to lighten the piece. He excuses himself for carrying such a clumsy concern by saying that it is the best barrel to throw buckshot that he can find, and he likes a buckshot gun for floating or lick-watching. When I see him load it with about forty grains of powder and eleven small buckshot I lose faith in him, rather. At the spring hole it was the same old story. The chief caught two fine trout: I landed one. I refused to throw another fly, and began to pack up, to Bill's disgust and surprise. I explain we have plenty of fish for the trout supper which he has planned, and by the time that is over it will be time to climb up to the blind for lick-watching. He acquiesces, silently stuffs his gun traps and puts that pack-bag and glides up the trail at a pace that keeps my short legs at a half trot. As we pass up the trail Bill points out a bark-roofed camp on the side hill, where we are to put in for the night. I suggest that it may not be easy to find our way in the dark. "Got lantern," he says, and we glide on. Fifteen minutes of sharp walking and we turn to the right, cross a low ridge and come out on one of the lovely fairy-like spots that one meets only in these woods. It was simply a moss-covered level bank on the margin of a trout stream, about twenty rods long and half as wide. But what a beautiful dry carpet it was, and the timber, all spruce and tamarack, just far enough apart for shade and elegance, with no undergrowth or tangle. All this was lost on the Indian, who only said curtly: "You make fire. I go over by lick; get some grub there." He disappears, and I proceed to make the fire, selecting a tall spruce with two projecting arms that answer as fire dogs. I soon have the tea-water on and before it comes to a boil Chief William is back. He has a lantern and ample supplies. Diving into the depths of that ever-to-be-remembered basket he brings out bread, pork, tea, sugar, butter, salt, pepper, tin drinking cups, and lastly a large round shortcake. Shall I ever forget that supper? I still hold the opinion that the trout of this region are the sweetest and best flavored I have ever caught. Also, there are mostly of the dark orange colored sort that I like as regards the flesh. They may be no better than the white fleshed; naturalists pronounce them all the same. But I vastly prefer the rich red color. Supper over, tinware, pack-bag and camp duffle were hurried under an immense slab of bark, and the chief led off for the lick with the silent, elastic tread of a panther.

P. S.—I have said little about the venomous flies that render the North Woods so warm and warm to the sportsmen and naturalists during the summer months. This is probably the country to which Mr. Tenyson refers when he sings of a land "Where each man walks with his head in a cloud of poisonous flies." They are nothing to me. I walk among them through these grand forest aisles safely as in a nursery. This paper is too long already. If it finds favor I will in my next give a simple recipe by which any one can flank punkies, mosquitoes and even black flies.

Foot of Stillwater, Jones' Camp, (Have lost the date.)

ADIRONDACKS.—Springfield, Mass., Aug. 11th.—Several of the Beaver River Club are going to the North Woods soon, and I will report when they come back. I received a kind invitation from Chas. Fenton, Esq., of Watson, Lewis County, Number Four, to come up and stay with him, but am obliged to refuse. He says he has now seventy-seven boarders, which with his servants and family make about one hundred at his house, and he has refused scores of applications for want of room. Twenty-five slept in his barn last night, for want of room in the house, which is a show for the popular North Woods as a game and fish must be scarce. In fact, I see a great change since my first trip into that region. F. B.

CAMP NOTES.

BY BODINES.

I PROMISED to tell you how we live in camp. Let me commence by describing our grounds, and the preparations we have made for resting in the woods. We are on a narrow point of land that is completely shaded by the widely reaching branches of two immense beech trees and an equally stately elm. At the extreme point are two tall pines, leaning to the right and left, affording us a view of a long and quiet pond that nestles at the foot of a high and densely wooded mountain. On both sides of our grounds, so near that they can be touched with a fishing rod, are running mountain streams, clear and sparkling. To our right a deep pool—where the trout delight to splash when the sun has disappeared behind the western mountain—its shore ornamented with a few crossed rods and anglers, is between which are growing ferns and blooming rhododendrons. Above them all, a mountain range, whose voices are now and then heard in praise of the beautiful camp below. To our left, the stream, then a clump of willows and beyond a meadow, which is lost in the dense forest and surrounding mountains, shutting us in so that but little sky is seen, and where the sun has but slender opportunity to oppress us with his mid-day beams.

At the extreme point of the camping grounds, where the two streams meet, to form the long pond below, and between the two leaning pines, is constructed our fireplace, made by erecting a stone wall four feet long and eighteen inches high, with shorter walls at each end intersecting it at right angles. The stones are covered with sods and clay, and over the top is laid two parallel iron bars upon which rest the coffee-pot, boiling-kettle and frying-pan. This arrangement is a great economizer of wood, and, when a good fire of coals lies under the bars, affords a cooking stove that permits us to present an elaborate bill of fare. Here we broil steak and lamb chops, fry fish, boil potatoes, bake flap-jacks—and what sport it is to flip them over—stew canned vegetables; in short, perform any of the culinary feats that we are in the habit of seeing in our kitchens at home. In our "dutch oven" are baked biscuit, Johnny-cake, fish, beef and beans, in a manner, too, quite enjoyable and surprising to any one who has not tried it. Our party is one believing that good, wholesome food, and a good fire, are inseparable from a camping-out expedition. We see no reason why we should not live as well, here in the woods, as at home, so we keep our larder well stocked with meats and other comforts obtained from the city twice a week. In the bank next to the mountain we have excavated a place large enough to receive a box four by six feet and four feet high. It is covered with sods, and has a door at one end, the inside next to the mountain is filled with ice, procured from the farm house close by, and here we keep our meats, butter and other perishable commodities. Next in order comes the dining-room, consisting of a canopy under which stands a table of ample dimensions, rustic in design and build. Four benches are arranged at a convenient distance about it, their several legs firmly planted in the ground. Over the table a shelf is suspended, the ridge-pole upon which is kept pepper, salt, sugar, butter, spices and other conveniences of frequent use. Under the table, on the ground, is our potato and onion bin, and just above, a shelf where dishes are placed when not in use. These dishes are of novel construction, were devised in this camp and have been such a great comfort to us that a description of them seems warranted. They are made of tin, no crockery of any sort is used in the camp. All who have camped out know that food becomes very quickly when served in the open air and upon tin dishes. It is not pleasant to sit down to a broiled chop, for instance, to find a rim of cold mutton tallow around the margin of your plate, the chop itself frosted with the same unsavory grease and your potato cold by the time it is buttered and ready for your palate. To overcome this very serious objection to an outdoor meal, we have devised plates and dishes. Two ordinary tin plates are soldered together by a narrow rim that unites their edges, leaving a half inch cavity between. In the rim, at opposite points, are two half inch holes, with a collar, in which corks are fitted. At meal time these corks are removed and boiling water poured into one of the openings while the air escapes at the opposite one. The corks are then put in place, when, for an hour or longer, you have plates to be used. Two ordinary tin plates, keeping your food as hot as when removed from the fire until the meal is finished. Three larger dishes, with covers, are constructed in the same manner, from which meat and vegetables are served. The plates being too hot for butter, smooth, round stones are used for individual butter dishes. Clam or mussel shells have answered the same purpose admirably. Under the edge of the canopy, so as to be sheltered from rain, are arranged two large camp stools, in which our provisions and utensils are transported hither. They now serve as cupboards. One of the chests contains large, square tin cans (fancy cracker cans), in which are kept flour, corn meal, rice, coffee, tea, dried fruit, sugar, etc.; in the other is stowed away the bread, crackers, dried beef, pickles, baking-powder, candles and the like.

Back of the dining-room, and further up the slope, under an arch of birch trees, is pitched a wall tent, which serves as a kind of store-room for our trunks and extra clothing; and, back of that, the large tent, 16x20, and 9 feet to the ridge pole, upon one side of which bunks are built and covered with ticks filled with straw. Over these ticks cotton-tiled quilts are spread, and over them sheets and blankets, affording a bed that would be quite desirable in more pretentious quarters. The remaining portion of the floor, which is covered with a new-down hay, with baskets lying about inviting a fellow, when so inclined, to a lounge upon the fragrant floor. The sides of the tent have pockets in which pipes, tobacco, magazines, papers, needles, thread, buttons, and sundry articles of that character are lodged. In the center of the tent stands a table, made of a barrel with a cheese-box lid for a top. Upon this do we invite epistles to our friends at home and to FOREST AND STREAM. To the left, and at the foot of a musical, pipe made of a dead cedar trunk, is a hammock, in which is our reading table and a hammock. In front of this is George's tent, where he rests when not engaged in the cooking department. Around and among the tents have we build many flower beds, in which

are growing and blooming the various wild flowers indigenous to these woods. The paths are banked by ferns; mounds covered with mosses and delicate vetivas; surround the trunks of the trees; the floors of the dining-hall and kitchen are swept clean, and all our surroundings in the neatest possible trim; and this is our mountain home, where every year we spend the month of June.

In former camp notes, I wrote what we did when it rained; let me now give you a sample of a bright and clear day.

This morning we were awakened at 5 o'clock by the singing of the birds, and the bright light of day shining through our tent walls. The music outside, the clear, balmy air, and the prospects of an unclouded sunrise, were irresistible. A fellow could not lie abed if he would; so, as if by general consent, all the campers were found assembled by the slope of the creek, performing their ablutions and looking toward, all faces lighting up for the application of the clear, cool water, and the prospect of a perfect day.

George had already built his fire, the tea-kettle was sending a cloud of vapor from its mouth, while the lid over the potato-boiler was dancing at a lively rate. The table was set, the trout sissing in the big pan, and George vigorously stirring a quantity of water that the sunbeams converted into flap-jacks. As we were chatting about the table (to which we had been summoned by George, who had converted the empty fish pan into a gong by beating it with an iron spoon), the sun made his appearance over a notch in the eastern mountain—right on time—indicating 6 o'clock. What a delightful breakfast we had there in the cool morning air, listening to the warblings of the birds, and watching the sunbeams dancing over the simple and airy and under the trembling leaves of the trees, while squirrels and chipmunks climbed out upon the overhanging limbs looking inquisitively under our canopy to see what we were up to. Butterflies, bumblebees, and insects of various colors and forms were flying about helter-skelter, without any special object in view, save to enjoy the glorious morning. A boy, on horseback, rode along the mountain road, over his head a shower of water, and under his feet the while an accompaniment of the loving animals that made the mountains ring with their deep, bass voices. Every note from man, animal, bird, insect or machine, seemed to ring out with a clearer tone, intensified by the still, cool air. Indeed, all our senses are quickened, for we can see further, hear better, smell keener, and taste more satisfactorily than during the rainy days just passed.

Breakfast finished, we smoke. Then, some of the party paddle on the ponds; others go in search of birds and flowers; the boys make ovens in the sand across the creek, and those inclined go fishing.

I being one of the "inclined," took down my rod from its rack against the beech, buttoned a landing net on my back, shouldered my creel and walked leisurely upstream to where I picked a fine fish the day before. I must cross the creek, and, not wishing to get wet before I reached the fishing ground, I attempted to pass the water under a fallen tree, that reached from bank to bank. This tree was wet from the spray that arose from a boulder, against which the current splashed beneath, and was quite too round in form to permit of an easy or secure foothold. Reaching the center of this rustic bridge by means of two rheumatic feet and sundry and multitudinous balancings of arms and legs, a confounded kinkishner, who was under my nose, and with an air of gravity and fishing-rod at the same moment. In trying to regain the first, while the second floated swiftly down the rapid and took lodgment in some willows, you might have witnessed, had you been there, some difficult feats in grotesque posturing. One moment I had decided to go in on the upper side of the log, but instantly changed my mind, and decided to go for the lower one, and, when my arms flew about like those of a windmill, I hesitated and wondered until no living mortal could have decided for me. Another slip, a unique bend of the back, a thrust of the hips backward and shoulders forward, fashioning a capital letter Z, changed the situation of affairs again, making it extremely doubtful to myself as well as a keen and much amused spectator on shore, whether I was to be hanged or whether I was to be selected for the plunge. At three would utter a cry, and I was selected for the plunge. As a decision was reached, when I took an intermediate course, and sat down with most consummate skill and great alacrity with a leg upon both sides of the log. As that very moment a total eclipse of the sun occurred, and stars—shooting stars—glittered and sparkled all about me. This celestial phenomena lasted until I gently slid from my resting place into the babbling brook and cooled my confused brain in its crystal waters. Gathering myself and rod from the stream, I sauntered on quite regardless of the dew-covered grass, but all the better prepared to admire the sparkling gems that greeted my eyes everywhere over the bright green meadow. Right in my path, from a tuft of weeds, flew a ground sparrow, who chatted to me as he hopped along before, to lead me from his cosy nest (which I stopped a moment to admire) and its three blue eggs and to the lake. He uttered a little clasp, who seemed rather pleased than otherwise that I should have made this call at his beautiful little home. Different was the action of the old hen partridge that I surprised a few minutes later, while attending her young brood along the mountain road. How she fluttered almost under my feet, giving me negro illustrations of the terrible sufferings and holdings of the maimed than you would have imagined it possible for any creature to invent. One leg was badly crippled, as though from a compound, comminuted fracture; both wings paralyzed and dragging upon the ground, utterly useless; blind in one eye; deaf in both ears; feathers all stuck in the wrong way; she seemed a wretchedly dilapidated creature indeed. But try to lay hands on her, and it is wonderful how she manages to keep her head and wings and tail feathers and holding of the limbs for reach. Follow her in these writhings and holdings of the limbs and fly into the deep covert with a chuckle of satisfaction at having led you so successfully from her family of little ones, which a moment before you heard peeping so sweetly among the bushes, and you conclude it is really worth the trouble to follow her thus, if only to hear her note of delight upon leaving you.

(To be continued.)

Natural History.

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BITERS BIT.

IT happened to us one day some years ago to find swimming in a small fresh water pond a carp duck or broadbill (*Fuligula marila*), which was unable to fly, although apparently sound in all its members, and which we succeeded finally in capturing in a landing net. It was observed during the pursuit that the bird was apparently unable to close its bill, and as soon as it was taken in hand the cause of this became evident. In the back of the mouth was the shell of a large mussel, partly opened, the hinge being toward the bird's body. The valves were still united, and their planes were at right angles to those of the bill. Between the united valves the posterior upper surface of the thick fleshy tongue was wedged in so that it was impossible for the bird to expel the shell from its mouth. The mussel was a large one, so large that there was no possibility of the duck's swallowing it. It was evident that the duck had attempted to swallow the mussel while it was open, and that after it had been taken into the mouth, hinge first, the latter had partially closed, grasping the tongue, and thus sealing both its fate and that of its captor. The mussel had been dead some time, for it had altogether disappeared from the shell, and the poor bird was woefully emaciated and died the night of its capture. This incident, rather unusual and interesting as it is by itself, becomes more so when compared with a number of similar occurrences which have from time to time been placed on record.

Most of us have heard the story of the raccoon which went oystering at low water, and in trying to pull one of the bivalves out of his shell got caught by the foot and was drowned by the rising tide; and there is a legend about a darkey who was captured in the same manner, though his adventure did not have any serious termination. In the columns of *Land and Water* there have at different times within the past few years been published some instances of the capture and death of birds and fish by their supposed prey, which will, we think, be of interest to our readers in this connection. One of these relates to the capture of a small fish called a shanny, by a mussel, and is told in the following language:—

A correspondent, Mr. Stephen Clogg, lately forwarded us a box containing a shanny and mussel, which he describes as having been taken in the harbor at Looe, Cornwall, in exactly the position represented in the accompanying illustration. The shanny and mussel, our correspondent writes, were taken by a fisherman who was gathering mussels for bait at Looe. Mussels are found in great numbers at the bottom of the harbor there, and the fisherman uses a long-handled, four-pronged fork for catching them. A boat is moored over the spot on which the mussels are to be found, and the fish is employed to bring them from below into the boat. In the case in question our correspondent assures us the shanny and mussel was brought up as shown in our illustration. The fish was alive when taken, and its head firmly fixed in the mussel. This certainly may be considered a curious capture, and from the evidence it may be fairly assumed that the shanny seeing a tempting mussel with its mouth open was induced to pop his head in—an operation which Master Mussel doubtless resented by immediately closing its valves, retaining the fish in its deadly grasp. A case in point of fish being taken in this way is mentioned by Couch, in which Lacépède records an instance where, as he (Lacépède) supposes, a shanny had made an attempt to feed on an oyster that lay with its valves open, in consequence of which it became shut up a prisoner by the closing of the shell. In this case, however, the shanny was more fortunate than the one taken the other day. For it is stated that in this condition of confinement the fish had continued to eat for some time, and that it was not until it was carried to a considerable distance. Upon opening it, the captive was again set free alive, and without injury. Shanny are very retentive of life, and would be found nice additions to salt water aquaria.

Another case bearing more directly on the one which came under our own observation, was spoken of by Mr. Buckland some years previously. In this instance a rail was caught by an oyster and drowned. Mr. Buckland says:—

Some time since, when examining the famous oyster bed at Helston, near Falmouth, Mr. Fred Hill, of Helston, was kind enough to accompany me and my friend, Mr. Howard Fox, of Falmouth, in our expedition. Mr. Hill mentioned to me at the time that he had a curious specimen of a bird that had been caught by an oyster. The bird and oyster had been mounted in a case by Mr. Vingar, of Penzance. The history is, that a woman who sells oysters, went one morning to the Helford River and found the bird—a common rail—quite dead, with its beak bed quite firmly by the oyster, which was still alive.

The bird in all probability was wandering along the foreshore looking for his dinner, and Mr. Oyster—possibly left longer by the tide than usual—was opening his shells waiting the incoming water. The hungry rail, seeing something that looked like a white and dainty bit of food, pecked at the body of the oyster, and probably pricked him sharply with his beak. The oyster then snapped his shells together as quick as a rat trap, and the poor bird instantly became a prisoner, to die (or possibly get drowned as the tide rose) in his prison.

Mr. Buckland's paper seems to get more than its share of such instances, for in a recent number we hear the story

of the choking of a grebe by a fish called a miller's thumb, which is provided with sharp spines on each gill cover, somewhat as are our own catfish. These spines caught in the throat of the bird and rendered the swallowing or disgorging of the fish impossible. We have never, by the way, been able to understand just how it is that birds and fishes can prey upon the catfish. Their rigid spines, one would think, might protect them from any enemy, and yet we constantly find catfish in the stomachs of fish, and not infrequently in those of birds. It is but a short time since a Florida correspondent sent us an account of a large catfish attacked by a heron, and mentioned finding the spine of one of these fish in the throat of another. We have found small cats in the stomach of a loon, and they are no doubt devoured by other birds. It may possibly be that after death the spines relax and lie flat by the side, but we do not remember to have seen anything that would bear out this conjecture. Of course as soon as the live fish is grasped he sets all his spines and holds them so stiff that they may be broken before they will yield to direct pressure, though they yield readily enough if the side just back of the pectoral fin be properly manipulated. The case of the grebe choked by the fish is described by Mr. Buckland as follows:—

By the kindness of Lord Radnor, Longford Castle, Salisbury, I have received a grebe (*Podiceps minor*) choked by a fish. The fish is fixed so firmly in the bird's mouth that I find it will go neither backwards nor forwards, so I can neither press it down the esophagus nor pull it out altogether. The fish in question is a miller's thumb. Mr. Grebe evidently was not aware that the miller's thumb was armed with two very sharp spikes on each side of the gill cover, and when the fish found himself in trouble he simply gave up the chase, and died, his head so firmly in the bird's mouth that he died from suffocation. An exactly similar case occurred some few years since, which I described in the columns of *Land and Water* as follows:—

"Mr. Arthur Crichton has been good enough to present me with an interesting specimen of grebe (dabchick) which was found dead with a fish in its mouth. It was found by Mr. Clutterbuck, of Long Wittingham, near Abingdon, who writes as follows: 'The grebe was found in the River Isis, in an eddy, dead, both bird and fish. I saw a fellow grebe to-day, fishing in the overflow, which is more or less shallow. I do not know if the miller's thumb would leave the river for the overflow—most fish do. The river at the spot is deep. The bird was found at the mouth of a ditch in which the water would be shallow, and dry when the river is low.'

"The first thing I did was to make a cast of the specimen. Mr. Searle has painted it so life-like that it now looks like the bird itself. It is very difficult to cast a bird, but if the cast is successful, it is far better than any stufing by the most skillful taxidermist. On dissecting the throat of the bird I discovered that the little spine-like processes on the sides of the head of the fish—which was a miller's thumb (*Cottus gobio*)—had stuck tightly in the throat of the bird. The position of the fish was head foremost, the back to the lower beak; the hard casing of the head of the fish had pressed so tightly down on the windpipe that it was completely closed up. Had the fish been swallowed the reverse way, probably the bird would have escaped uninjured. I have had two or three specimens sent me of kingfishers destroyed by fish sticking in their throats. There is a case on record where a poor fisherman was killed by a father-lasher (*Cottus scorpio*), a sea-fish allied to the freshwater miller's thumb. The fisherman was annoyed at finding the father-lasher among his shrimps, and seizing him, put his head in his mouth, and attempted to bite it off. The fish, however, gave a struggle, slipped down his throat, and expanding his spines at the side of its head, managed to immovably fix itself in the larynx, thus killing the man by suffocation."

THAT RAT CATCHER.—Boston, Aug. 1th.—Editor *Forest and Stream*.—I don't think that rat was drowned. The snake must have swallowed it then and there, or it would have gone home to digest his meal. It is most likely that he surprised the rat and sprang on it unaware, and once with its teeth fast on the rat's head, he would suffocate it in no time, without its having the glint of a chance; besides, his prey was probably nearly paralyzed with fright. No matter how "game" it may be, there are but very few animals on two legs or four that are not panic struck at the sight of a snake.

As to not finding wounds, that is not singular. The snake's teeth are sharp as needles, but equally fine, and while arranged for the purpose of holding—a dozen rows or so across the roof of his mouth, and all pointing backward—are useless for chewing purposes, and their very fineness would prevent their leaving marks. The rat could not have lived long enough to struggle much any way, for a snake is one of the strongest things that live, and with its nose pointing inward and its head half swallowed from the outset, it must have smothered speedily.

If the snake is what I have been accustomed to term "water snake," it could not have crushed him. Constriction is only used with effect by tree snakes, while the striped snake and his cousin, the present incumbent—if indeed they are not the same—are never found there; although I did once capture a most curious thing, a live, yellow locust, fifteen feet from the ground, but that was hardly a tree, as it was so thickset that he undulated from twig to twig, not coiled around.

In conclusion, I would say that I ought to know whereof I speak, having had, as a boy, a mania for snakes, having kept them by the tubful to watch their habits. At that time and afterward, I was accustomed to carry home every one I met to turn loose among my squash bugs. They are excellent buggers. But it takes a soft hand and a quick eye to get a grip in the back of their neck without a bite.

JOHN PRESTON TRUE.

We are rather inclined to doubt the constricting powers of the water snake, and for that reason suggested the drowning of the rat.

Fish Culture.

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CARP APPRECIATED IN TEXAS.

THAT the carp are rapidly growing in favor in the Southern States is a well-known fact. The following letter shows what they think of them in Texas:—

KOSSE, LIMESTONE COUNTY, Texas, June 28th. Prof. Spencer F. Baird, United States Commissioner Fish and Fisheries:—

Dear Sir: The German carp, sent Sam Bell and me last fall, are doing as finely as any one could possibly ask. When they arrived there was very little water in our pond, so we put them in a well with about four feet of water in it, and connected the well with the tank by means of a small ditch, letting the tank water fill it up; the ditch was left open so that the water would not stagnate. We put five of them in the tank (or pond) and fed all of them on corn bread and vegetables that had seed, such as tomatoes, squashes, etc., all of which they ate. They seemed to like the squash best and preferred it baked. Several of them seemed to be sick when they reached us, and died soon afterward; the remainder are now about four inches wide and a foot long. Corn bread is their favorite diet, and by feeding them at the same place every day they become accustomed to look for it, and now all we have to do when we wish to look at them is to tie a piece of stale bread to a string and float it on the water, when they come up all around it and scramble for it as hogs do for corn. There are numerous parties in this neighborhood with good ponds who want to know whether they can get any this summer or fall. Please let me know at once, as fish in this section are scarce and high, and the carp seems to be the fish. Yours truly, VOLNEY METCALFE.

SHAD IN THE COLUMBIA RIVER.

ASTORIA, Oregon, July 22d.

Prof. Spencer F. Baird, Washington, D. C.:—Dear Sir: Your letter of the 3d inst., asking for fuller information in regard to the presence of shad in the Columbia River, came duly to hand; and, in reply, I will say that the first fish of this kind was taken early in the fishing season of last year (1879), in a stationary fish-trap in Baker's Bay, a few miles—one or two—above Fort Canby, W. T. I did not see this fish, but it was shown by the owner of the trap, Capt. James Williams, Tanzy Point cannery, Oregon, to George Hume, a well-known salmon canner of the Columbia, who pronounced it a shad. A few days later Capt. Williams brought two more to Astoria and gave them to Hon. D. C. Ireland, editor of the *Daily Astorian*, who invited me into his office to see them. I had never seen a shad, and expressed the opinion that the fish in question was some unknown species of herring, and asked me to save and forward a specimen. Shortly after taking the two last mentioned, the traps were swept away, and no more were taken that year. This year Capt. Williams built a trap on the Oregon side, just above Fort Stevens, and about May 15th he brought me the first taken. Except that it was larger—fourteen inches to eleven—it was exactly like those taken last year. It had been cut in catching, and was otherwise in poor condition, but he told me that his trap had been injured and he might not get another. I sealed the specimen in a tin case and was on the point of sending it to you when Prof. Jordan arrived here on his first visit. Thinking it amounted to the same thing, I gave the fish to him, and he, on inspection, pronounced it a shad. I called his attention to the spots and "sickle edge," and he said those points were characteristic of young shad and disappeared at maturity. I have found Prof. Jordan's knowledge of salmonidae to be exceedingly accurate, and so I have full confidence in his assertions in regard to this fish. The fish-trap was repaired about the middle of June, and on the 17th Capt. Williams brought four specimens to Astoria. These were bought at a large price by Mr. A. J. Megler, of the Occidental hotel, who, knowing that I wished to obtain a specimen, brought the best one and presented it to me. It is now in Prof. Jordan's alcohol net. Immediately after the capture of these four, the trap was again swept away, and will not be again rebuilt. It is Capt. Williams' opinion—in which I coincide—that there are hundreds and perhaps thousands of these fish in the river, they being too small to be caught in the gill nets, that being the only method of fishing practiced here; the small amount of seining being hardly worthy of mention.

Whether shad will become acclimated so far as to propagate here is, I think, extremely doubtful. I am informed that in June, when they spawn, it is necessary that the water should have a minimum temperature of 70°. I did not test the river water at that time, but the mountain streams were as follows: Young's River, June 6th, 53°; Klaskanine, June 13th, 50°; Klaskanine, June 27th, 58°; while the Columbia, to-day, in the ship's channel, is 65°. I think the attempt now being made to introduce carp into lakes on Clatsop Plains will fail for the same reason. In Eastern and Southern Oregon they may succeed.

In closing I will say that I would like to know what food fishes other than the salmonidae will thrive in a country where the temperature of the water is as above. I suppose it is well known that our winters are mild.

Respectfully yours, C. J. SMITH.

AMERICA'S EXHIBIT AT BERLIN.—The following letter shows how our exhibit appeared to the representative

from France, who went there to study the fishery display of all nations:—

SOCIÉTÉ D'ACCLIMATATION, PARIS, July 29d.
Dear Sir:—In the time of my last letter I was unwell, and I had not the leisure to tell you all that I wished. Permit me to write to you now to express to you all my admiration for the magnificent show of the United States Fish Commission at the Fisheries Exhibition, in Berlin. The American division was utterly the first among all other sections in this exhibition, and it was in perfect correlation with the magnitude of all things made by the great American people.

There was much instruction to gather for us in this display, and it was a great pleasure for me to see all those things, in company with the learned Prof. Brown Goode, and Mr. Mather. The apparatus of the "Fish Hawk," above all, amazed me. How much we have to do, in France, to follow your countrymen in the work of fish culture!

I must acknowledge that in our country very few people understand, as it deserves, all the importance of fish culture. The Société D'Acclimation is nearly alone in the work, and as its resources are very small, the results every year are not extensive. However, we hope this year to create a laboratory with a little school of fish culture, in which we shall exhibit as far as possible all the apparatus and methods used in foreign countries, particularly the recent American improvements, and also living specimens of all species of exotic fishes worthy of special attention. I do not fail to make you acquainted with the execution of this scheme, and I trust you will be good enough on occasion to grant us the aid of your precious advice.

I have the honor to be, dear Sir, yours most respectfully,
RAFAEL WATTEL, Secretary.
Monsieur le Prof. Spencer F. Baird.

Sea and River Fishing.

FISH IN SEASON IN AUGUST.

FRESH WATER.

Trout, *Salmo fontinalis*,
Salmon, *Salmo gairdneri*,
Lake Trout, *Salmo namaycush*,
Land-locked Salmon, *Salmo gairdneri*,
Mackinac, *Esox lucius*,
Brook Trout, *Salvelinus fontinalis*,
Yellow Perch, *Perca flavescens*,
Grayling, *Thymallus arcticus*.

Black Bass, *Micropterus salmoides*; M. *pollux*.

SALT WATER.

Sea Bass, *Centropristis striata*,
Sheepshead, *Archosargus probatopterus*,
Striped Bass, *Morone saxatilis*,
White Perch, *Morone americana*,
Weakfish, *Cynoscion regalis*,
Bluefish, *Pomatomus saltatrix*,
Spot, *Leiostomus xanthurus*,
Cero, *Cynoscion regalis*,
Haddock, *Melanogrammus aeglefinus*,
Kilohake, *Merluccius nebulosus*.

MOVEMENTS OF SALMON.

IN our issue of July 29d we published a letter from Prof. Hind to Prof. Baird, entitled "Late Appearance of Canada Salmon," which contained a new idea on the use of the hook on the lower jaw of the adult male during the breeding season. This letter attracted much attention, and was widely copied. We print below Mr. Mowat's letter on the subject to the *Mirrimichi Advance*, in which he does not agree with Prof. Hind in all things, although he indorses his views upon the use of the hook, which the Professor says is for the purpose of rupturing the ovarian sac and allowing the eggs to flow into the ducts, an operation accomplished, as he says, by the male fish gripping the female behind the pectoral fins. Mr. Mowat says:—

Prof. Hind's letter on the unusual scarcity of salmon in all our North Atlantic rivers this year possesses very great interest, and I hope it may be the means of further elucidating the mystery. "The oldest fishermen," of whom we have heard so much, say—well, it is some comfort—that forty years ago, when salmon were in abundance, they experienced just as poor, if not worse years than this has been. Many men of skill and knowledge believe that from the marks, bruises and worn condition of very many of this season's fish they have actually been caught in the grip of the ice, or embayed by it and destroyed in some way in their migration here. Our weather here last fall was very cold, very unusual, and the river produced a great show of both salmon and grayling, as well as a very large show of smolt and parr. All the June and July fish, also, had gone before cold weather. The Professor says some salmon only visit the rivers for sanitary purposes, being biennial spawners, or only doing so once in two years. Before I can believe this theory I must have stronger proofs, for such salmon do not enter any of the Bay Chaleur rivers. All our June fish (and they seldom arrive before the 1st—often June 10th) have the ova half developed. The July and August fish are still further advanced, giving about Oct. 10th, finishing 20th, and going to sea in about ten days after, some of them immediately. During the seven years I have been engaged in pisciculture the time has been uniform, not varying more than two days, even though the salmon changed to come three weeks earlier. These fish do not winter here in the river, and when they do the first fish of the succeeding spring I cannot say, but I suppose they are. Our spring kelt are fish coming from sea late (or in middle) of November with the ova at the same stage as the June fish, and I should think requiring three months to mature; they go well up to headwaters at once, where, owing to the numerous spring brooks, the ice does not form to the same extent or solidity, often thawing out in February and March, and where they deposit. Following the ice down in the spring, these go to sea in June. On examination these kelt will be found quite different from the fall kelt, being well mended and bright, with the next year's ova quite well formed, the roe being from three to four inches in length.

Now, should those roving sanitary schools spoken of by the Professor enter this river, they must do so under the ice in April and depart before our American catchmen have known of our estuary clear for three and four weeks, before a fish made its appearance. To show the rapidity with which they come I may state that I took

not long ago, a salmon at the Indian House, with a partially digested capelin in it. The caplin never leaves salt water, and the nearest point at which the salmon could get it is Huron Island, seventy-two miles from Indian House. That extreme cold may retard the growth of the ova, is possible, but to extinguish the instinct or desire to spawn after the ova is fully developed is impossible.

Owing to the very heavy and severe ice runs, both fall and spring, as well as the heavy spring freshets, which most of our Canadian salmon rivers are subject to, just at the time when ova is newly laid, or when the young fish is bursting the shell, artificial propagation is much more a necessity than in more favored countries. This last spring particularly the river bed has been completely upset by spring ice destroying most, if not the whole of the naturally laid ova. Independent of this cause, I know, from actual examination, that three-fourths of the ova naturally laid are dead eggs. I attribute this fact principally to the rapidity of the water carrying away the milt before coming in contact with the egg; probably, also, to either a want or an excess of males. I have observed on a bar where fifteen or twenty fish were spawning a large male rushing round chasing smaller males and grise and paying little attention to the females spawning, and we now know that if the egg is very short time in the water without contact with the milt it will not fructify.

I do not ignore the giving of all due care to the preservation of the river, so that a good stock may be always there for natural production, but when by artificial production 98 per cent. can be turned out, in our Canadian rivers at any rate, it is a most valuable assistance and one that we cannot afford to despise.

That every fish has its own fish is certain, and that every fish finds its own river, and knows it—and knows the portion of it where it passed its young days—I believe also. I saw a peculiarly marked fish, having three old spear wounds on one side, while boating in the fall of 1867. She was spawning on the bar at Larry's Gulch. The next fall, not five yards from the same place, myself and men again saw her. In the June of the following year, I found her in Mr. Haddock's ice house at the Indian House, taken in a net there. Her weight was thirty-three pounds. The three scars or cicatrices on one side were so marked that there was no possibility of mistaking the fish.

Salmon in some rivers may rush, and keep rushing for the headwaters, as, for instance, in the Fraser River. I give our salmon credit for more sense; they know there is more danger in the small, contracted pools, or headwaters, than where the big pools and deep water exist, and since the thorough investigation was inaugurated the large pool at Metapedia holds more fish than thirty miles of the Kedgwick, and fish now spawn from tidewater to the source. I am certain there are some of the very first run of fish in the Metapedia pool to-day, and any expert can tell by the color and condition of the fish how long they have been in the fresh water.

I fully indorse the Professor's opinion respecting the use of the hook on the lower jaw of the male fish, having actually observed it in '73. The following year I told Mr. Charles Hallock of it, when I expected he would laugh at such a theory, but he didn't. Still, I can hardly go so far as the Professor, having kept the sexes separate for a week before being mature, and many of them have given ova freely on lifting them out of the water. But many cases, when you feel the eggs completely separated and the fish is not yet ripe, and you find the gills at the throat will at once bring the ova.

Now, Mr. Editor, far be it from me to dispute the authority of Prof. Hind, or to say he is wrong in any of his conclusions. I only tell you what I know from actual observation in the Restigouche River, and no other. Any light or information respecting the nature and habits of our most valuable fish should be disseminated, and I trust you will be very much contributors on this subject. I am, sir, yours truly,
JOHN MOWAT.
Restigouche Fish Hatchery, Des Rites, July 29th.

FLY-FISHING FOR SHAD.

SPRINGFIELD, Mass., July 24th.

Editor Forest and Stream:—I intimated that I should soon revisit Holyoke, and essay the capture of some of the gaudy beauties in a scientific manner, by the use of the fly, and I have practiced there of fishing with a well-lure—that is, if I could find my incomparable tip. Well, I found that tip—no doubt smile—for it was in the hollow cane all the time, stuck fast. Let us change the subject, for I know that in your crowded columns space is valuable, and therefore I will not occupy it with the comments that I offered upon the occasion, but will at once take you

On the breast of the beautiful river,
Where glorious sport can be had;
And set your wild and ardent liver,
In a light with the gaudy shad.

The Professor accompanied me upon this occasion—not that he cared to fish, but his scientific sensibilities had been greatly shocked by my assertion of the fact that shad had not only regularly feed in fresh water, but afford first-class sport. This statement was so much at variance with his pre-conceived notions that he repudiated the idea at once, and laughed me to scorn for setting myself—a mere tyro—against all of our well known ichthyologists in a matter of fact; but as I stoutly maintained that I was right, he consented to go with me, stating that he could disprove my assertions, or at least explain their inconsistency. When we arrived, we found that my favorite position was occupied, and so cast anchor just below the old pier, where the two currents meet. As the Professor was a stranger to "the delights of the swaying line," he trusted his fortunes to a hand line, and commenced whipping across the current with a half an hour before either of us got a rise, when the Professor, who is a little inclined to be nervous, gave a fearful yank, and with many ejaculations and much struggling with the line, hauled in a clam as large as my hand. Instinctively realizing my opportunity to repay him in kind for some of his many lectures upon his favorite topic, I assumed a look that Solomon would have envied, and in a few moments I was unloading fundamental truths, I turned my honest eyes full upon his face, saying: "Professor, I am utterly dumfounded that you should express surprise at so

common an occurrence. Why, every schoolboy knows that the festive clam writh, in his gayer moments, sportively rise to the fly; and to see a naturalist of your well-earned reputation ignorant of the fact fills me with astonishment, and I no longer wonder that you dispute the equally well-known fact that shad will also rise." With a comical grimace he expressed himself as now willing to believe anything, and that he was ready to swear that, not only would shad bite, but that I could pull them in with that whistling line. But he saw the whirl of a heavy fish about thirty feet away, and quicker than thought my stricken fly was lightly dancing among the undulating circles—there was a silvery flash and a sudden shower of pearly drops thrown high in the air as my victim seized the line; and, as with "instinctive turn of wrist" I fastened the cruel steel in his mouth, he gave a leap that showed his magnificent proportions and with speed of a frightened bird rushed down the stream. I was entirely occupied with my fish, but I must have glanced at the Professor, for I can yet see the look of wonder—almost awe—in his wide open eyes. No word was spoken, for my heart was too full of satisfied pleasure. No doubts or fears disturbed my mind, for my trusty tip was in place and bending all its energies to accomplish the defeat of our scaly foe. After more than half an hour of sport, with my shad, I showed the landing net, and with a long-drawn satisfied sigh, lifted him into the boat. We could not tell his weight, as my pocket scales register but six pounds, and they proved inadequate to the task. We at once resumed our fishing, and the Professor had extraordinary luck in getting bites; but not a fish did he land. In vain I cautioned him against twitching their heads off. No sooner did he feel the "soul inspiring thrill" than with a spasmodic yank he would tear the hook from their tender mouths, and then wonder "why they didn't hang on." I soon had another one going, and as he kept near the bottom, and did not show much fight, I soon had him in the boat. This fish had swallowed the fly, and it was fast in his stomach, and I was obliged to use my knife. Upon opening him we found that his stomach was distended, almost to bursting, with food, which showed the landing net, although there was also the well defined skeleton of a small fish of some kind, and strangest of all, several bits of vegetable substance that we pronounced to be pickerel grass. The Professor was unplugged, and when I lifted up on the point of my knife a wee bit of crustacean that I had found in the mass, he exclaimed, "I'll give it up now; that is a *Gammarus minus*!" "I could not," said I, "the settles I forever; for if a shad swallow anything, I do not dare try to pronounce it—he can swallow anything."

"Yes," said he, "and I should not be surprised if you were to tell me that they went ashore nights and robbed hen-roosts."

Whether this was intended for a sly kick at my homily upon the clam, or merely the fanciful expression of his highly wrought feelings, I am unable to say. Our squadron was now reinforced by a cockle-shell of a boat, containing a crew of two men who brought their frail craft to anchor about thirty yards to our right, and a little while later, the schoolmaster came, and I thought, perhaps, that I should attempt to describe, although more words will convey but a faint idea of the scene.

After safely mooring their tottish boat, they let out a line from each side and one from the stern; then the man who was stationed aft put his rod together, and tying a couple of flies to the end of his line with a good square knot, he took off his coat, and, splitting on his hands, raised up on tip-toe and—well he didn't throw his clear ashore, as I imagined he was going to, but with a powerful back-handed swing and a sudden jerk forward that would have snapped a green hickory, he landed his flies upon the water with a splash that was only equalled by the noise of the rod as it followed suit and buried half its length beneath the surface. Just here the Professor attempted a witticism at my expense, by saying that the man was casting. I was not ready to perceive the humor, and, learning the truth, I was casting that he had ever seen at my hands; but I entirely ignored the feeble effort, and confined my attention to affairs in the little boat, which swayed and rocked fearfully at each successive throw of the stalwart fisherman, who kept it up bravely, and literally lashed the waters into foam. Not the least amusing part of the performance was to see his companion dodge at every cast. After the third or fourth cast, I came to the conclusion that it was not from fear of the hooks, but that it was the noise of the whistling line that caused him to shy. With ever-increasing wonder at the power of his arms and the astonishing strength of his rod, I watched with deepest interest the performance, until a splash in the water and a fierce tug at my line forced me to attend to my own affairs. But in spite of the gaudy struggles of my captive, which my rod with all my efforts could not still fondly turn toward the little boat, and although I lost my fish by the means, I felt amply compensated when I saw our hero suddenly throw his rod into the bottom of the boat with a vim that would have broken a crowbar, and loudly calling to his companion to fetch the landing net, he seized the line at the stern, and with wildly gyrating arms hauled it in hand over hand. "Oh! for the pen of a *Mary* to portray the picture. Oh! for the pen of a *Mary* to portray the scene, as he surged upon the tautened line and "hollered" for the net, which was describing erratic parabolas in the air, but still surely coming, as we could plainly see by the upheaval of one end of the boat and the sinking of the other. Soon the water was pouring over the stern, and our hero spasmodically sounded the retreat—which his companion effected by the circular motion of his arms, and he did not relax his hold of the line nor cease those frantic yanks until he safely flopped into the boat a yearling shad that would weigh nearly half a pound. It was now almost night, and having demonstrated to our entire satisfaction that "casting" was the true and only sportsmanlike way to capture these gaudy fish, we reeled up our lines (every fly was gone from the Professor's) and started a bonanza of that deep feeling of satisfaction in our hearts that is only experienced by the happy angler at the close of a day of successful sport.

I had intended to descend upon the thrilling sensations experienced at the strike of a lively fish—although your companion may be playing him at the time—but this will keep until my next.
SHADOWN.

BASS RODS AND BASS NOMENCLATURE.—*Leesburg, Va., July 30th.*—The Potomac and Goose Creek have been deplorably "unclear" for more than ten days, and even their tributaries near this place have been unfit to fish. I have, as a substitute for sport actual, read the columns of your paper diligently for sport ideal, especially Dr. Henshall's excellent papers on black bass and fly-fishing for them. I have some notions on the subject, possibly heterodox, which I wish to air. For instance, on the position of one's reel. I find it most convenient to cast with my reel underneath; but to play my (fish with the reel on top, where I may see the line as it goes out, and regulate the "go" thereof. As soon as I hook a heavy fish, I lay my rod in my left hand, the reel up, handle to my right, and right hand itself holding the butt, or working the handle of my reel as the occasion seemeth to demand. The only trouble I have, is from the twisting or warping of the reel. If, however, I play the fish with my reel underneath (as I cast), the rings are more quickly worn so as to fray the line. One can take a middle course, though east and play your fish with reel and rings underneath, except when the fish runs toward you, and then transfer to the left hand, using the right in reeling in the line.

With regard to flies, I fancy those tied on about a No. 3 spout, or round bend of like size, with the wings reversed and separate. I know that trout flies when in the water have usually their wings stuck together, being wet. Yet the separate-wing flies seem more attractive, and I believe are more to the fish. Now comes what I fear is a heresy in rods. I like a three-piece rod with the butt piece longer than the mid-piece and the mid-piece longer than the tip, say four, three and a half and three feet respectively. I know some of the best anglers disagree with me here, for I once asked one of our best rod makers and most accomplished anglers about this matter, and he held up for the equal division of the whole length. Two pieces of equal size in length, as equally strained as possible, with the middle ring, would break where they were joined, i. e., in the middle. The point of greatest strain would be at the joint. One being heavier than the other would throw the point of greatest strain away from the joint on the heavier piece, i. e., towards the butt, and if the pieces were not only unequal in length, but different in size, the point of greatest strain would be further from the joint and nearer the heavier end of the heavier piece, causing, I believe, the point of greatest strain to be very near to the greatest strain of the rod. From the reel, where, of course, the rod is strongest. If this theory be true, a rod would be practically unbreakable by any fish ever hooked by the fly. If one uses such flies as mentioned above, they are most conveniently carried in a tin mustard plaster case easily slipped into the breast pocket of a fishing coat.

As to the nomenclature, it seems to me that *Micropterus* is singularly unfortunate, even with the explanation of the broken dorsal fin which caused George Lacépède to call it little-fish. Several common names could call a fish by its little-fish name. As to the species we have in the Potomac, as, except by comparison, no one would ever think of "small-mouth" when looking a specimen in the face (if a fish has any face). If you stand directly in front of a black bass (*Micropterus salmoides*) when his mouth gapeth for "ye little minnow," you can't see any fish at all; he is then, to your eye, all mouth. Oh, if a naturalist could light upon some method of nomenclature such that an ordinary man, with the least common sense, could call a fish by the proper characteristic name, after examination, which name being put into Latin (as a common language for men of different tongues) would forever serve as a concise description of the scaly rascal. The different names ought to be answers to definite questions agreed upon by naturalists as proper to be asked by the observer upon first seeing the specimen.

I have dreamed that all this might be true some day. Now, to close all this fish talk with a different kind of palaver, why do the modern archers trim the feathers of their arrow in a line not parallel to the wood of the shaft? The best Indian arrows I ever saw had the edges of their feathers parallel to the arrow.

The name *Micropterus* (small-fish) is not so very inappropriate if the pectorals are considered, besides it is really not important that a name should be descriptive in these days when new discoveries render the descriptions useless. (See names like *fluviatilis*, *vulgaris*, etc.)

Concerning the mouth question, the size is only relative, and the mode of measurement is with the mouth shut, and to note how far back it is cleft. This is one of the principal marks by which the two species are separated. In the "big-mouth" (*M. palatidis*) it extends to or beyond a vertical line dropped from the posterior part of the orbit, or cavity of the eye, while in the "small-mouth" it only extends to about the middle of the pupil.

BLACK BASS AND ROCK BASS.—*Millwood, N. C.,*—What you call at the North the rock bass, we call here the black perch. They grow to a pound weight, and are a fine table-fish withal. I have seen three or four miles of a Virginia line, and was raised on Dan River, the dividing line at this point between North Carolina and Virginia. I have caught many fine perch out of the Dan River, and also the red horse. The latter resembles a mullet or sucker, but they are a fine fish, weighing sometimes six pounds. The "goggle-eye" is the largest perch we catch. The "red-eye" is smaller, not as large as the black perch, and is of a different color. I may be mistaken as to the "red-eye," as I have not caught one for many years, and have a distinct recollection of them, as I was then a boy. I think they are what you call black bass; are lighter in color than the "goggle-eye," but never grow to a very large size and have a very red eye. The black perch are dark in color, hence their name. I have caught fifteen very fine "goggle-eye" in a short time with hook and line. I have seen silver perch caught with hook and line in the pond here weighing something over a pound. It was the prettiest fish I ever saw. It shone as bright as the brightest silver when landed. They are baited with minnow, same as the "goggle-eye," but are not as good a table-fish as the latter, nor the black perch. The latter was formerly caught in the pond in great quantities, and are native fishes, but are very scarce now. I think my pond, which is a very large one, covering several acres, will do for carp. It is a splendid

stream for fish, rock bottom, and abounds in springs. I think the pond is quite deep. Don't you think the salmon trout would do well in it? also the carp? If you think the salmon trout will do, I would like to try them also. Do you think my pond is too large for salmon trout, and are they much trouble to raise? They have been catching the red horse out of the Dan now for two or three weeks. They are caught in "dip-nets," baited with mush, made out of corn meal with cotton worked in to make it tough. They are also caught with "grab-hooks" baited with mush. The "grab-hooks" are a novelty to some of you that never saw them. They are put on lines with one small hook for bait, and below it three large hooks tied on the line in a circle; these are called grabs. When the fish sucks (they seldom ever swallow a bait) the mush on the small hooks, the line is jerked upward and the fish caught under the throat by the grabs. The red horse, as I've just said, are rarely ever caught by swallowing a bait, hence the invention of the grabs, which chins the fish when they suck the dough on the bait hook. I give you these little items, thinking they may interest you. I'm a proficient at chinning. I have chinned many a pike, when the water was too clear for them to bite, and when they are very shy and wary and will not allow you scarcely to approach the bank where they sun themselves without darting off into deep water out of sight. It will not be long before they are catching the perch in the Dan. I will tell you their species, color, etc., and write you.

We have supposed the names rock bass, "goggle-eye" and "red-eye" to belong to one fish, the *Ambloplites rupestris*, but the common names of fishes are fearfully mixed. We incline to the opinion that your "black perch" is the black bass of the North. The name bass is used at the North for most of the fishes which are called perch at the South. If the water in your pond rises above 70° at any time, it is not suitable for trout; better try the carp. The salmon trout, or lake trout, do not thrive in small lakes or ponds. Unless your "pond" is over a square mile in extent, and from thirty to sixty feet deep, with a bottom temperature in summer of 60°, or lower, you can do nothing with lake trout.

TEXAS TROUT.—*Corpus Christi, Texas.*—In your issue of June 10th, I see an article by Dr. J. A. Henshall, of Cynthia, Ky., another by C. L. J. of Willis, Texas, and a short note from Hastings, of Austin, Texas, concerning Texas "black bass," or "trout."

There may be genuine trout in Texas, but if so they are very far from the limits of civilization, for I have fished Texas waters since 1878 and never saw a speckled trout other than what is called in the South "salt water trout," and in the North "weakfish."

As to the black bass, I have caught what are called black bass in the Western States, in nearly every stream in Western Texas, far aside from the "croppie" or "goggle-eye," the "wide-mouthed perch," and the "red-bellied perch" or "sunfish," they are the only game fish of any note in the fresh waters of this State, south or west of Austin.

All of these fish are taken from the same streams, and at all seasons of the year, as they do not hibernate this far South. The croppie is at times a voracious biter, but is weak and slides out of the water as easily as a piece of tin. He is generally about as flat as a shingle, and affords but little sport to the angler. At other times, although they may be seen plentifully, they will not touch bait. I have given to him an alias, viz., "goggle eye," on the authority of persons better posted in fish nomenclature of the North and West than myself, although I confess I do not like it, as I always considered the "croppie" and the "goggle eye" as two distinct fish. The Doctor (Henshall) gives the "rock bass" as the "goggle eye," and says he is not found in Texas.

Hallock's "Sportsman's Gazetteer" gives "rock bass," "croppie" and "goggle eye" as identical. I do not know which is right, but I do feel satisfied that we have any quantity of black bass proper in Texas, and they grow large, too, as I have taken more than one over five pounds in weight, and I saw and measured one over nine pounds. The fish is identical with the one known as black bass in the Western States, and, as C. L. J. says, it differs according to the difference of the waters in which it is found, etc. One taken from a clear spring stream, and another from a muddy lake placed side by side, would not even be called relations by marriage, so little would they resemble each other.

Now, what is the fish I have alluded to as the "wide-mouthed perch"? He is as deep as a sunfish of the same length, about twice as deep as a mullet has a black bass. His color is that of a bass, and he is as game a fish in every way, and as fine eating. I have taken them in the Perdinale, seventy-five miles west of Austin, weighing upward of three pounds, although they rarely exceed two pounds in weight. He will eat anything any time, and readily takes a fly.

Dr. Henshall describes him in describing rock bass, except that he does not give him the requisite breadth, or, more properly, thickness.

This wide-mouthed perch is very dark, and our "croppie" is a light-colored, slim, watery fish, with a small mouth and a small amount of meat on his bones. I cannot think that Dr. Henshall means that the "croppie" is not caught in Texas, for I can show him specimens any day at San Antonio. So of the wide-mouthed perch. I have heard these sometimes called "war-mouthed perch."

Imagine a black bass just twice as deep as those in the North and you have a picture of the wide-mouthed "perch" of this State. I will state here, by way of record for C. S. W., that every thing is "cat," "perch," or "trout" in Texas with the average fisherman of inland waters. I have even seen "suckers" and "buffalo" called "trout," solely, I suppose, because they would not bear classification either as "cat" or "perch." BEX R.

The "war-mouth" of the South is the "rock bass" of the North. Dr. Henshall is an authority upon these fishes.

FROM THE RANGELEY LAKES.—*Dirch Lodge, Motelunkamuk, via Anlover, Maine, Aug. 2d.*—The extremely dry weather during June and a part of July has caused

the powers that be to draw from these lakes to an unusual extent, in order to supply the needs of the factories at Lewiston. The water throughout the whole chain of lakes is lower than for several years. The repairs in progress at the Middle Dam also necessitate the drawing off of the water, and the whereabouts of the trout is a problem at present unsolved. Very warm weather, and low water have probably combined to cause the fish to seek the deepest part of their feeding grounds. But as the number of fishermen is greater than heretofore, the haunts of the big trout will soon be discovered, and due report will be made to your readers. Wild rice from Rice Lake, in Canada, was sown in May, after being well soaked, but has not shown itself as yet. It was sown according to directions, in from four to six feet of water. Some, claiming to be well informed, say it does not sprout the first year. Can any reader of experience give information to this? The new route via narrow gauge railroad to Phillips is very popular, and Page's Elmwood Hotel at Phillips is a resting place, indeed to all who are en route to the lakes. The hotel is extremely nice in all its appointments, and deserves the large patronage it has received. The lake road from Anlover has been considerably improved since last year. More anon.

LAWRENCE.

FORKED RIVER.—"Riverside House," N. J., Aug. 15th. —Fishing is capital here yet, the catch of weakfish ranging from 25 to 150 per boat per day, with three or four bluefish, as they are against beginning to bite. One man caught five large ones, yesterday with a snail, by throwing into the surf from the shore. Striped bass are beginning to bite, and a few have been brought in for the last two days, and we anticipate bass fishing in earnest next week. Mr. Lawrence brought in the finest string of weakfish of the season, all over three pounds, and one of them weighed three and a half when dressed; so you see the rod has not been laid by, although the breech-loaders are hard at work. Our score to-day was: The Magic, Messrs. Speers, Morrill and Fawcett, twenty-one weakfish; the Idle Hours, Mr. C. E. Corbin, sixty weakfish; the Belle, twenty-nine large ones.

A. B.

LAND-LOCKED SALMON IN RANGELEY LAKES.—*Camp Kennebago, Aug. 2d.*—I have been told that the largest salmon being taken in our lakes this season, the largest was taken about two weeks ago at the mouth of the Penobscot (near Upper Dam) by Mr. W. E. Sheldon, of Fribourg, Conn. Weight, four pounds.

FRED.

LARGE FISHES.—Last week Mr. Blackford had a fifteen pound sheepshead (*Archosargus probatocephalus*) upon his stand in Fulton Market which was one of a lot of fifty which weighed from ten to thirteen pounds, caught near Barnegat, N. J. This is a very unusual size. This week he had a Spanish mackerel (*Cybinus macleatum*), of seven pounds, which was caught off Orient, Long Island.

RED SNAPPER IN RHODE ISLAND WATERS.—A fine "red snapper" (*Lutjanus blackfordii*), was captured in a pound net on Rhode Island, on Tuesday, Aug. 10th, and sent to Fulton Market. This is the first recorded occurrence of this sub-tropical fish so far North.

MACKEREL.—Mackerel are exceedingly plenty all along the coast of Maine, as far east as Penobscot Bay, fishermen say they are most abundant they ever knew, but they are mostly small. Menhaden scarce, but still seen. Off Harpswell the lake has been exceedingly abundant very close to the shore. The fishermen say the dogfish have driven in the bait (small fish), and the lake have followed.

Game Bag and Gun?

—Address all communications to "Forest and Stream Publishing Company, New York."

GAME IN SEASON IN AUGUST.

Woodcock, <i>Philohela minor</i> .	Red-backed sandpiper, or ox-bird, <i>Tringa americana</i> .
Black-bellied plover, ox-eye, <i>Amphispiza bilineata</i> .	Great marshed gull, or marlin, <i>Larus ferox</i> .
Scotcheson's heron.	Willow, <i>Tadama scintillans</i> .
Long-billed curlew, <i>Numenius longirostris</i> .	The other, <i>Tadama scintillans</i> .
Blue-winged teal, <i>Querquedula discolor</i> .	Yellow-shanks, <i>Tadama discolor</i> .
Red-breasted snipe, dowitcher, <i>Tringa discolor</i> .	

(This enumeration is general, and is in conflict with many of the State laws.)

"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, surf-bird, phalarope, avocets, etc., coming under the group *Limicola*, or shore birds. Many States permit prairie owl (pinnated grouse) shooting after Aug. 15th.

—Our Office Boy has just returned from Bill Lane's resort at Goud Ground, L. I., with a fine bag of bay birds. He says Mr. Lane's wholesome table was well supplied, as usual, and the kindness he received will not soon be forgotten. The flight of birds was unusually good, and he wants to go again next week.

A SPORTING COBBLER.—*South Abington, Mass., Aug. 5th.*—That Alvin Lucas was born somewhere in Plymouth County, Mass., I have no doubt, for as long ago as I can remember, he lived in the town of Kingsbury, not far from old Plymouth Rock. He followed shoe-making it was said for a living, but could generally be found in the woods with dog and gun. His little shop was the loafing place for all who lived near by, and many were the tough yarns that were here told. When at work his old gun always stood loaded near by, and was to the unhappy hawk or crow that dared to test its quality by appearing within range.

Among uncle Alvin's visitors was a fellow by the name of B-n Gray, who was forever playing some practical joke on the old man. Indeed, he had no scruples as to who became the victim of his jokes, but Alvin generally had to suffer.

It seems they had made up a party to go to the shore after geese, and Alvin, Gus and four others were in the crowd. Of course Alvin took his old gun, and as it was at this time of the year kept loaded for geese, he did no

DANSVILLE, N. Y., Aug. 6th.—Glass ball shoot on the grounds of the Dansville Club. Robbins 9, Twiss 8, C. P. Miller 8, C. A. Young 8, Forsyth 7, Malder withdrew, Jeffreys 7, Corryell 6, Hall 6, Crestfield 6, A. Baker 10, Hyde 6, John Faulkner 8, Green 9, Toles 4, A. Sweet 8, J. F. Williams 9, N. W. Miller 6, Gardner 7, Gesner 7, Andrews 8, C. Hill withdrew, Webster 9, Miles 4, Amesen 8, Sackett 9, C. Green 9, Griswold 10, Tennant 6, Stearns 8, Coran 4, P. Conkila 4, O. C. Matison 7, Webster 8, Olney 8, Hyland 9, Warkley 7, Hess 10, J. E. Young 4, G. Fois 8, Schwingle withdrew. Ties of 10—Baker 5, Griswold 5, Hess 4, Baker and Griswold, of Putney Club, divided, Ties of 9—Robbins 5, Twiss 1, G. P. Miller 1, Crestfield 1, Green 1, Williams 2, Webster 1, Sackett 4, C. Green 2, Hyland 2, P. J. Robinson 2, C. Hill 2, Corryell 2, Baken 2, Palmer 2, Ties of 8—Stearns and Olney divided third money. Ties of 7—C, Jeffreys, Dansville, won fourth money.

Second shoot, Forsyth 7, G. P. Miller 10, H. Twiss 8, Hills 6, Tennant 8, Robbins 7, John Faulkner 8, Mills 7, Sweet 5, McFetridge 5, Andrews 9, Matison 8, Corryell 10, A. Baker 10, E. P. Green 8, Sackett 8, Whitman 2, C. Green 9, Griswold 7, Crestfield withdrew, Hall 6, Whitehead 6, J. E. Webster 5, Webster 7, Stearns 8, Hyland 10, Toles 4, Jeffery 9, Warkley 8, Gardner 8, Moore 9, C. A. Young 9, G. Bryant 4, Fois 8, Malder 5, J. P. Bryant 7, Olney 5, Gesner 6, J. F. Williams 10, Olenson 7, J. Young 5, J. Faulkner 4, J. H. Hoes 8, Eschbach 8, Ties of 10—Corryell and Baker, Putney Club, divided first. Ties of 9—Chas. Jeffreys, Dansville Club, won second money. Ties of 8—J. N. Faulkner, Dansville Club, won third money. Ties of 7—F. J. Robbins, Dansville Club, won fourth.

Third shoot—Corryell 5, Baker 10, G. P. Miller 10, Williams 8, Hyland 8, C. A. Young 10, Sweet 8, C. Hill 9, Sackett 8, Andrews 8, Crestfield 7, John Faulkner 7, Griswold 9, C. Green 7, Robbins 8, Matison 8, Stearns 9, Jeffery 7, Toles 8, Webster 8, Outhout 8, Forsyth 10, Moore 10, Warkley 9, Hess 10, Twiss 8, Whitehead 7, Whitman 7, Olney 9, N. A. Miller 10, Fois 8, Ties of 10—G. P. Miller, of Cornish Club, won first money. Ties of 9—Andrews, of Monroe County Club, and Stearns, of Rochester Gun Club, divided second money. Ties of 8—Hiram Twiss, of Cornish Club, won third money after a hard race with Robbins and A. Sweet, of Dansville. Ties of 7—J. A. Faulkner, of Dansville Club, won fourth money.

Fourth shoot.—Sweepstakes, 24 entries, 5 balls each. G. P. Miller, Cornish, won first money. Hiram Twiss, Cornish, won second money. Hyland and Warkley, Dansville, divided third money.

The boys had a good day and good time generally. The Monroe County Rochester Gun Club, Seneca Gun Club, Cornish Club, Putney Club, Steuben Club, Dowling Club, of Mt. Morris, Livingston Club, of Genesee, Homerville Club, Scottsby Club, Wayland Club, Dansville and Seth Green Club, of Dansville, were represented.

MEXER ROD AND GUN CLUB.—This club had their regular shoot on last Thursday, and was presented with a splendid gold medal by Judge John A. Dinkie, a member of the club. The conditions are that any member winning it three successive times shall become the owner. The score is as follows—at seven birds each:—

	Killed.		Killed.
Engler.....	7	Stier.....	4
Minger.....	4	Windholz.....	6
Voss.....	4	Hoffmann.....	5

The Aery Medal, which was also contested for in another shoot, was won by Mr. Windholz. The Judge, who refused to shoot in the contest for his own medal, took a hand in for the Aery Medal, and was a tie with Windholz, who, in shooting off, beat the Judge by one bird.

VINCENTTOWN, N. J., Aug. 24.—The Coaxen Glass Ball Club, of this place, held their monthly shoot here to-day. Card's trap, 18 birds:—				
S. Hillard.....	7	N. H. Peacock.....	6	
W. J. Irick.....	6	S. S. Butterworth.....	7	
S. Hillard.....	6	J. W. Haines.....	5	
Tie shot off at 6 balls:—				
S. Butterworth.....	6	W. S. Hillard.....	4	
Butterworth won badge.				
			SIEDRAKE.	

MUSKOGON, Mich., Aug. 7th.—The fourth annual shoot of the Muskogon County Shooting Club, of Ottawa County Shooting Club, was held at Muskogon, Aug. 4th; Mole's rotary trap, 18 yards rise:—

MUSKOGON COUNTY CLUB.		OTTAWA COUNTY CLUB.	
Sweet	011101111111-13	White	001111111100-10
Crestfield	001101110110-10	Hayton	111101111101-13
Voss	011101111111-13	Chambelin	111111111111-14
Hewitt	110111111111-14	Dor	011111111111-14
Doron	010110111011-10	Piercon	110111111111-13
Hitchcock	110111111111-12	Finch	0001111111101-9
Neumeister	110001111111-10	Palmer	011101111111-12
Dixon	110111111111-13	Lockie	1001111101010-9
Total	106	Total	104
		L. W. W.	

CAPITAL CITY GUN CLUB.—Washington, D. C., Aug. 5th.—The result of the regular weekly medal match, shot Saturday afternoon, by the club given below. Mr. McLeod was unfortunate in hitting a ball with four shots which failed to explode, and under our rules was scored as a lost ball. McLeod's rotary trap, screened: 21 balls each:—

W. W. Eldridge	20 yards.	20	T. E. King	20 yards.	18
E. M. McLeod	22 yards.	19	J. L. Morhouse	20 yards.	15

SPARTANBURG, S. C.—A grand glass ball and pigeon shooting tournament will be held at Spartanburg, S. C., commencing Thursday, Aug. 26th. Teams from Richmond, Raleigh, Fayetteville, Charlotte, Asheville, Hendersonville, Savannah, Augusta, Atlanta, Charleston, Columbia, Orangeburg, Aiken, Newberry, Eborre, Wainsboro, Yorkville, Rock Hill, Union, Greenville, and other points have been invited, and are expected to attend.

PUBLISHERS' DEPARTMENT.

AN UNUSUAL REMEDY.—The life of Mr. H. H. Warner, of Rochester, N. Y., was saved by the Safe Kidney and Liver Cure, which now bears his name. What this wonderful remedy did for him it has done for thousands, and we believe, will continue to do for those afflicted with kidney, liver or urinary troubles of any kind. If any reader has any organic trouble, this remedy will prove "a friend in need."

—For a handsome and comfortable lounging or invalid chair, there is nothing better than the "Wilson Patent Adjustable." See advertisement.

—Purchasers would do well to notice the reduction in prices made by Wm. Read & Sons, of Boston.

WERE THEY FOR THE FOREST AND STREAM?—Three handsome panther skins were found in the mail-bags received by the steamship Arran, from Venezuela, last week. They were not addressed to any person, and Postmaster James sent them to the Customs-house. A dead bat, which had evidently been alive when mailed, and a lively snapping-turtle, were also found in the domestic mail.

The Kennel.

—Address all communications to "Forest and Stream Publishing Company, New York."

FIXTURES.

Toronto, Canada, dog show, Sept. 8th, 9th and 10th. Entries close August 21st. H. J. Hill, Toronto, Ont., secretary.

St. Louis Kennel Club, St. Louis, Mo., Oct. 5th, 6th, 7th and 8th. Chas. H. Turner, St. Louis, Mo., secretary.

Pennsylvania State Agricultural Society International Colley Trial, Philadelphia, Sept. 20th, 21st, 22d, 23d, 24th and 25th. D. W. Soller and Elbridge McKinney, secretaries, P. S. A. Society, Harrisburg, Pa.

Nebraska State Sportsmen's Association Field Trials, Milford, Nebraska, Sept. 30th and Oct. 1st, and 2d. J. H. Harlow, secretary, Lincoln, Neb.

Pennsylvania State Field Trials Associations Trials, Oct. 1, J. H. Statton, secretary, Pittsburg.

Eastern Field Trials Club's Second Annual Trials, Hobbs Island, Peconic Bay, L. I., Nov. 20th, Chas. Peutz, New York, secretary.

National American Kennel Club's Second Annual Field Trials, third week in November. Chas. De Ronze, New York, secretary.

OF ENGLISH DOGGES.*

The seconde Section of this discourse.

Of gentle Dogges serving the hauke, and first of the Spaniell, called in Latine Hispaniolus.

Such Dogges as serve for fowling, I thinke convenient and requisite to place in this seconde Section of this treatise. These also to be reckoned and accounted in the number of the dogges which come of a gentle kind, and of those which serve for fowling.

There be two sortes The first findeth game on the land. The other findeth game on the water.

Such as delight on the land, play their partes, eyther by swiftnesse of foot, or by often questing, to search out and to spying the byrde for further hope of aduantage, or else by some secretesigne and priuie token bewray the place where they fall.

The first kinde of } The Hauke, such seruie }

The seconde } The net, or, traine,

The first kinde haue no peculiar names assigned vnto them, saue onely that they be denominated after the byrde which by naturall appointment he is allotted to take, for the which consideration.

Some be called } For the Falcon, Dogges, } The Pheasant, and such like. } The Partridge }

The common sort of people call them by one general word, namely Spaniells. As though these kinde of Dogges came originally and first of all out of Spaine. The most part of their skynnes are white, and if they be marked with any speottes, they are commonly red, and somewhat great therewithall, the haeres not growing in such thickness but that the mixture of them maye easely be perceaued. Othersome of them be reddishe and blackishe, but of that sorte there be but a very few. There is also at this day among vs a newe kinde of dogge brought out of Fraunce (for we English men are maruolous greedy gaping gluttons after novelities, and curious connoisseurs of things that be seldom, rare, straunge, and hard to get. And they be speckled all ouer with white and black, which mingled colours incline to a marble blew, which bewtifveth their skinnes and affordeth a seemly show of comfynesse. These are called French Dogges as is aboue declared already.

The Dogge called the Setter, in Latine Index.

Another sort of Dogges be there, scrutable for fowling, making no noise either with foot or with tounge, whyles they followe the game. These attend diligently vpon their Master and frame their conditions to such buccies, motions, and gestures, as it shall please him to exhibite and make, either going forward, drawing backward, inclining to the right hand, or yielding to ward the left, (In making mencion of fowles my meaning is of the Partridge and the Quale) when he hath founde the byrde, he kepeth sure and fast silence, he stayeth his stepes and will proceede no further, and with a close, couert, watching eye, layeth his belly to the ground, and so creepeth forward like a worme. When he approacheth neere to the place where the byrde is, he layeth him downe, and with a marcke of his pawes, betrayeth the place of the byrdes last abode, whereby it is supposed that this kinde of dogge is called Index, Setter, being in deede a name most consonant and agreeable to his quality. The place being knowne by the meanes of the dogge, the fowler immediatly openeth and spreadeth his net, intending to take them, which being done the dogge at the accustomed becke or vsuall signe of his Masters reacht vp by and lay, and draweth neerer to the fowle that by his presence they might be the authors of their ouer insuaring, and be ready entangled in the prepared net, which conning and artificiall indoeuor in a dogge (being a creature domestical or househould seruant brought vp at home with offalls of the trencher and fragments of victuals) is not much to be maruailed at, seing that a Hare (being a wilde and skippishe beast) was scene in England to the astonishment of the beholders, in the presence of our Lorde God, 1564 not onely dauncing in measure, but also with his former footes vpon a taburet, and obseruing iust number of strokes (as a pactioner in that arte) besides that nipping & pinching a doggie with his teeth and clawes, & cruelly thumping him with y^e force of his feete. This is no trumpery tale, nor trifling toy (as I imagine) and therefore not vnworthy to be reported, for I reckon it a requital of my trouble, not to drowne in the seas of silence any special thing

wherein the providence and effectual working of nature is to be pondered.

Of the Dogge called the water Spaniell, or finder, in Latine Aquaticus seu inquisitor.

That kinde of dogge whose seruice is required in fowling vpon the water, partly through a naturall towardnesse, and partly by diligent teaching, is indued with that property. This sort is somewhat bigge, and of a measurable greatnesse, hauing long, rough, and curled haire, not obtayned by extraordinary trades, but giuen by natures appointment, yet neuertheless (friend Generall) I haue described and set him out in this manner, namely powde and noted from the shoulders to the hindmost legges, and to the end of his tayle, which I did for use and customs cause, that beyng as it were made somewhat bare and naked, by shearing of such superfluitie of haire, they might attaine the more lightnesse, and swiftnesse, and belesse hindered in swimming, so troublesome and needlesse a burthen being shaken of. This kinde of dogge is properly called Aquaticus, a water spaniell because he frequeteth and hath vsuall recourse to the water where all his game & exercise lyeth, namely, waterfowles, which are taken by the helpe & seruice of them, in their kind. And principally duckes and drakes, whereupon he is lykewise named a dogge for the ducke, because in that qualitie he is excellent. With these dogges also we fetch out of the water such fowle as be stoinge to death by any venomous worme, we vse them also to bring vs our boulties & arrows out of the water (missing our marcke) whereat we directed our leuell, which otherwise we should hardly reconer, and oftentimes the restore to vs our shaftes which we thought neuer to see, touche or handle againe, after the helpe & seruice, circumstances they are called Inquisitores, searchers, and finders. Although the ducke otherwhyles notably deceaueh both the dogge and the master, by dying vnder the water, and also by naturall subtilty, for if any man shall approche to the place where they build, breede, and syt, the hemes go out of their nestes, offering themselves voluntarily to the hails, as it were, of such as draw into their nestes. And a certain weaknesse of their winges pretended, and infirmities of their feete dissembled, they go so slowly and so leasurly, that the mannes thinking it were no mastery to take them. By which deceitful trickes they doe as it were entyse and allure men to follow them, till they be drawne a long distance from their nestes, which being compassed by their provident conning, or conning providence they cut off all inconueniences which might growe of their returne, by using many careful and curious cautes, least theyr often haunting beyng y^e place where the young ducklings be hatched. Great therefore is their desire, & earnest is theyr study to take heed, not only to theyr broode but also to themselves. For when they haue an ynkling that they are espied they hide themselves vnder turfs or sedges, wherewith they couer and shrowde themselves so closely and so craftely, that (notwithstanding the place where they lurke be found and perfectly perceaued) theyr theyr harbour without harme, except the water spaniell by quicke smelling discouer theyr deceiptes.

Of the Dogge called the Fisher, in Latine Cuius Piscator.

The Dogge called the fisher, whereof Hector Bothus writeth, which seeketh for fish by smelling among rocks & stones, assuredly I knowe none of that kinde in England, neither haue I receaued by reports that there is any suche, albeit I haue been diligent & busie in demanding the question as well of fishermen, as also of huntsmen in that behauior, yett they were careful and earnest to learne and vnderstand of them if any such were, except you holde opinion that the beauer or Otter is a fish (as many haue beleued) & according to their beliefs affirmed, and as the birde Pupine, is thought to be a fishe and so accounted. But that kinde of dogge which followeth the fishe to apprehend and take it (if there be any of that disposition and property) whether they do this for the game of hunting, or for the heate of hunger, as other Dogges do to whet their appetite, they will be fished for want of food, except the becke of carrion and putrified fleshe. When I am fully repleued and burthened of this doubt I wil send you certificate in writing. In the meane season I am ignorant of that both Ailanus, and Aelius call the Beauer Knapotomium, a water dogge, or a dogge fishe, I know likewise thus much more, that the Beauer doth participate this property with the dogge, namely, that when fishes be scarce they leaue the water, and range vp and downe the lande, making an insatiable slaughter of young lambs, until theyr paunches be replenished, and wile they haue left themselves full of fleshe, then returne they to the water, from whence they came. But albeit so much be granted that this Beauer is a dogge, yet it is to be noted that we reckon it not in the beadowe of English dogges as we haue done the rest. The Sea Calfe, in like manner, which our country me for breuitie sake call a Seale, other more largely name a Sea Vele maketh a spoyle of fishes betwene rocks and bankes, but it is not accounted in the catalogue or number of our English dogges, notwithstanding we call it by the name of a Sea dogge, or a sea Calfe. And thus much for our dogges of the second sort called in Latine Amphipuri, serving to take fowle either by land or water.

* A Diall pertaining to the second Section.

Dogges serving (are di- Land spaniells (called in The fisher used by Setters) latine) is not of their own sort of fow- into Water spani- els or finders. (Cuius Aquaticus) caput) ber but several.

HOW SOME DOGS SCRATCH.

THE replies to our request for the enlightenment of a Wisconsin man, who thought that dogs could not scratch themselves while standing up, have been numerous and entirely satisfactory. So many letters have come to us on the subject that we have been compelled to epitomize them in order to find any room for them at all. Following is the evidence volunteered on this momentous question:—

Editor Forest and Stream.—I had a setter, dead, as Horace Walpole would say, this last winter, at the possible age of seventeen or eighteen

* Of English Dogges, | the diuersities, the names, | the natures and the properties. | A short Treatise written in latine | by Johannes Caius of lacedo | rick, Doctor of Physicke in the | University of Cambridge. And newly drawen into Eng. | by Iohn Iamieson | a | milne Student. | Nature etiam in Britie fin | sedet diuina. | Scene and altered. | * Printed at London | by Richard Chisles and are to be sold ouer against S. Sepulchre Church without | Newgate | 1576.

years. In reading the paragraph relating to this question to-night in the hearing of my family, we all recalled a frequent habit of our favorite (Grand) of scratching his neck and ear, while standing up, with his right hind foot. It was especially a common practice with him after a scrimmage, when his ear had been bitten sore, and was kept so often for days in the summer time by flies. I do not remember, however, to have observed in him or any other dog a similar attitude reproduced in the "cut" published in *FOREST AND STREAM*.

A much more curious and uncommon occurrence than this it was once my privilege to notice—that of a bald eagle scratching his head with inimitable nonchalance during his flight. Some months ago I was standing on the bank of the river, somewhat concealed by a hedge of cedars, when I observed a bald eagle approaching at a height of some sixty or seventy feet above the ground. As he passed me at the distance of about ten yards he reached upward with his right foot, and simultaneously bending his head backward and sideways, he brought the two into contact and continued to scratch his head during a very appreciable time, evidently with unaffected pleasure. Whether the act had more of a petical than a political significance, or whether it was simply anti-parasitic, did not distinctly appear. E. G. W.

Editor Forest and Stream:—

Happening in the store of a friend, a customer was standing at the counter, while the clerk was wrapping up a cake of dog soap, the wrapper of which bore a cut similar to the one that excited your query. Calling attention to the cut, I suggested that it was unnatural, and after considerable discussion and the raking up of memories pro and con, the verdict was that a dog could not scratch and stand up at the same time. Just as we had settled the matter to our satisfaction and were about to separate, a fine black setter—one of a pair belonging to a gentleman down the street—cantered gaily past where we were standing and stopped probably ten yards from us. He shook his head angrily and then lifted his right leg and gave his neck a vigorous scratch! The attitude was precisely as represented by the cut on the wrapper of the dog soap. Mutual significant glances were exchanged, but no comment. C. E. C.

Editor Forest and Stream:—

I may not be speaking out of turn or judged guilty of a presumptuous ventilation of knowledge if I arise to explain that I have seen a dog scratch himself standing up, and I have seen a dog stand up and scratch himself. When the advertisement first came to my notice I thought it represented the most grotesque and ill-proportioned cut I ever saw, but asked no questions. I own a fine English setter, and claim for him as much canine sagacity as is generally manifested by the majority of thoroughbred dogs, together with as large a crop of the *Pulex irritans*—notwithstanding much scratching—as Sprat's dog soap and frequent dredgings with "Steadman's flea powder"—as usually falls to the lot of one educated dog to care for. He is as glad as Tennyson's John when he is permitted to walk to the mail, and must be accredited with manifesting his delight full as clearly as the poet's Jack. This dog is often allowed to "fetch" the *FOREST AND STREAM* from the post office, and as soon as his master is comfortably seated he will mount the nearest chair or stool and patiently wait for the wrapper to be removed. To-day, a chair being in close proximity, he peered over my shoulder while I was perusing No. 25, and searching the advertisements for a "big find," such as 13 vols. of *FOREST AND STREAM* for \$15, when Catery's dog, with his tail docked short behind, met the wandering gaze of man and beast. And while hastily scanning the bill of fare for the purpose of selecting the first course, he scratched himself before me, standing up, "Pray, my Catery, if he ever saw a dog scratch himself standing up?" The animal seemed to heed the prayer, for he at once took the floor and assumed about the same attitude as the picture delineates. The battle raged fiercely, and in the height of tumult he seemed to exhibit the same despairing look and some of the ungainly points of the newspaper quadruped. But the flea was still there.

On the premises is another of the canine family, a very fine shepherd. To-day my watchfulness was rewarded by seeing the two in consultation, and concluded they were discussing the petition of "J. A. T." but was unable to learn positively, for in their training they were taught not to mouth their game. They did, however, of one accord and at the same time, stand up and scratch themselves. Since then I have found them frequently practicing the pose and fearful of the result. I read and circulate the advertising dodges, they believe it high art and absolutely necessary for the completion of their education. To disabuse their minds and free their bodies from the pest, I have applied very many preparations recommended as efficacious and guaranteed to kill, but with such discouraging results that I am most ready to give up in despair. The sympathetic chord has again been struck by the contention of Catery's dog, and gives new birth to the hope that there is a balm for every ill. I feel that if I wish to be counted as a man merciful to his beast my clear duty is to give this much-advertised soap a fair trial. Should it prove to be "a bane to fleas"—"a boon to dogs"—I will let you know. MARK.

A correspondent writing from the United States Marine Barracks, Annapolis, Md., under date of July 24th, gives his testimony with official exactness: "This morning, while on my way from the Maryland Hotel, in this city, to the Marine Barracks, I noticed a large black dog of the Newfoundland species so relieving himself from fleas, without resorting to lying down. So impressed was I that I took out my watch, which was keeping correct time, and found it was exactly 8:30. The locality where I observed said dog was immediately in front of the newspaper store of Mr. Roger Rivers, on the northeast corner of State House circle and East street. J. P. B., of West Boylston, Mass., says: "A gentleman pointed to the piece and wished me to read it, at the same time asking, 'Does not a dog often scratch standing up?' A setter bitch which was with me at that moment began to scratch her left ear standing, as if bound to put the answer 'yes.' G. R. M. writes from St. Joseph, Mo.: "If you watch a dog that has the mange you will find that he does scratch while standing up. I have been watching; to-day a poor brute that is in that

condition, and have had an ocular demonstration of the fact." A Hammonctown, N. J., observer has seen his dog do it repeatedly, and adds: "It is not to be considered a lazy dog, and an awful lazy man, that has to lie down whenever he wants to scratch." From Glen's Falls, N. Y., comes this: "No longer ago than yesterday (and before I had read your article) I called the attention of a friend to the ingenious way a little dog had of scratching himself, and a way I had never before remarked in dogs, although thinking one most of my life. The little animal, standing

up on its hind legs, and with one hind leg, balanced itself in such a manner as to use the inner side of hind leg to scratch perfectly the outer surface of his belly—first the right side, then shifting, scratching the left side, all the while standing rigidly upon his left." A Newark, N. J., friend offers to send a dog to "J. A. T." and so demonstrate the thing. A Le Roy, N. Y., man has a setter which he alleges performs the feat regularly every minute in an hour and a half. A Beaufort, S. C., observer states that "a dog scratches himself always by standing up. He can only scratch his head when lying down, and he very much oftener scratches his head standing than he does lying down. No dog can scratch his belly, or about his forelegs, lying down; he scratches his back by rolling and dragging his back along the ground." "J. A. T.'s criticism is a farce: 'Catery's dog soap' notice is correct and artistic. All dogs scratch themselves standing up. Sometimes a dog, when lying down, will scratch his head or ear. If standing up, he does not lie down to scratch his ear; if lying down he does not get up to do it." All very well, but F. R. G., Laconia, N. H., says: "Have been watching my dog scratch this morning, and notice he sits down every time, and on thinking the matter over, don't think I ever saw one scratch in any other position. One of the Pennsylvania Commissioners of Fisheries challenges 'J. A. T.' as follows: 'By the way, if your friend, 'J. A. T.', of Beloit, Wis., wishes in good faith to come to the 'scratch,' my celebrated setter dog 'Doc' will accommodate him almost any time with a fair square 'stand up,' 'go-as-you-please' scratch. He does it with ease, with right or left hind foot, in true 'Catery style,' and apparently with gratifying results. 'Canis Scratchibus' (rough Latin, by the way) sends us a picture of how his dog does it, and adds that 'almost every observing farmer's boy who owns a well-harassed canine knows more about this than the Wisconsin editor.' 'Capt. Clayton, Pleasant Plains, N. Y., avers: 'I saw my dog Duke do it this Monday morning, July 26th, time 8:08; first on one side and then on the other.' As we explained, our Wisconsin friend is an editor. The following, therefore, has additional weight, because its author is a Western editor, too: 'Your friend in Wisconsin need not go very far to become satisfied that dogs can scratch themselves while standing up. Chicago, proverbially in for everything, contains one such animal, and I am the happy possessor of him. My English mastiff, thirty-three inches high at the top of his shoulders, performs that feat with seeming delight several times every day. He has a habit of scratching himself on the right side of the chest, and on the left side of the chest, on three levels. I never thought this was such a remarkable performance before your friend expressed his doubt that it could ever be done.' A Palo Alto, Mich., correspondent has in his kennels a beagle hound, a black and tan foxhound, two setters and a pointer. 'Yesterday, as I sat in the yard reading, a beagle came out on the front porch and proceeded to scratch his right ear, which he had in a standing position. After scratching his right ear he changed positions and scratched his left ear, still remaining standing. During the whole performance his position resembled very much the position of the dog in the cut in your advertising columns.' 'Cornell' has seen his water spaniel lift his left leg and scratch his side while standing up, and he wants the Wisconsin editor to come and see it too. An Albert Lea, Minn., correspondent writes says: 'Whisk, Frisk always scratches his ear standing up. Frisk is a Irish setter, and the other is a pointer. Finally, from a Wauseon, Ohio, notary public comes this testimony: 'It is officially asked, 'Does a dog scratch himself standing up?' A scientific scratcher always does. I have been observing for a week the manner of four gentlemanly, well-bred dogs while scratching, and three of them invariably exercise their toe nails while standing up. I would suggest that the question would be harder if answered and read as follows: 'Did you ever see a dog scratch his left fore shoulder with his right hind leg while standing up?' That would settle the veracity of that picture in Catery's ad." A J. M., of East Boston, Mass., would like to add a few words on the subject. 'Last Monday afternoon, about 4 P.M., I was standing at the store door, and saw a dog stop and scratch himself, on the corner, in exactly the same position as in the cut in your paper of Catery's dog soap, with the slight difference that he used his left hind leg to scratch with, while Catery's manipulates the right.'

It is now settled to the full satisfaction of our Wisconsin friend, we trust, that dogs do scratch themselves while standing up, and the discussion of the subject is permanently closed in these columns.

N. Elmore, of Granby, Conn., writes that he has sold all the dog beagle pups and foxhound pups, which he advertised a few weeks ago.

SUCCESSFUL TREATMENT OF SNAKE BITES.—Dr. Upshauer, writing from Carrollton, Miss., July 15th, tells us how he has cured snake bites: "I have practiced eight years in the Yazoo swamps. I have attended many cases of snake bite, both of rattlesnakes and moccasins. My treatment has invariably been to cut down freely with a bistoury, dilating the orifices made by the two fangs. After permitting a reasonable amount of bleeding, I stuff into the wounds the dry salt of carbonate of ammonia. At the same time I give a tolerably strong solution of the same internally, say five to eight grains every fifteen minutes, until a catharsis has been taken (less, if sufficient). Upon dissolving, the ammonia is rapidly communicated to the blood, and through it to the tissues previously visited by the poison. The latter, as is the case with all animal poisons, being of an acid reaction, the powerful alkali, on overtaking it, instantly neutralizes it, destroying its specific properties. I rely upon this treatment always, and have never had any trouble with fatal cases. The only drawback is, it is adjunct only, and I attach but little importance to it."

The Rifle.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE IRISH-AMERICAN MATCH—1880.

NOW that the heat of conflict is over it may not be amiss to make some remarks in respect of the event of 1880 and the match at Dollymount, which is likely to hold for many a day, its proud position as the climax of team shooting on both sides; and here I must contradict emphatically the assertions made by some reporters that the Irish team was deficient either in discipline or system. Such an assertion is absurd in the face of the score achieved. In one of these accounts, reproduced in your paper, it is said that after their unfortunate opening at 1,000 yards the Irish team showed their want of regular system, etc. The fact was far otherwise; that, in spite of an accident which might well have disgraced any team; namely, Milne's miss owing to a bad cartridge, the Irish in their subsequent shooting cleared off 7 points of the American lead, and were steadily overhauling them until the smoke episode, which cost them 4 points in Wm. Kirby's score. It is curious to remark that in 1875 and 1880 the Americans won the match at the middle range, and, accidents excepted, the shooting at 800 and 1,000 yards was as nearly equal as possible.

As to Col. Bodine there is but one opinion here, and that is that he carried out the tactics indicated to him in a masterly manner. He took in hand a team composed of heterogeneous elements, representing in some ways conflicting interests, and we, in this country, built some hopes upon these facts. We saw that they were not only practicing, but experimenting, and that some of their early experiments were at least risky; but the Captain quickly bided his time, and at almost the last moment dominated his team in a way which astonished those not in the secret. He put aside some whom we thought his very strongest men and retained those whose past records gave them little right to such a distinction. Having the option of shooting with the men, and every inducement to do so, he adopted the safer course and elected to put only six in the field. One of those afterward stated his opinion that if the selection had been made otherwise, or even the squadding of those men differently arranged, victory would have been more than doubtful. I am mistaken in the gratitude of the American people if they fail to convey to Col. Bodine their warm approval of the manner in which he accomplished the difficult task imposed upon him. What disaster may befall a team who, with less discipline and without the necessary authority confided in him, attempts to fill the character of captain of an American team, is well illustrated in the Halford-Hyde match at Wimbledon, the result of which will doubtless be to cause such regulations to be made for the future as will prevent the repetition of a proceeding futile and unsatisfactory in itself and tending to destroy the prestige of those genuine and authorized international contests, which, properly and deliberately conducted, are productive of excellent results.

As to reputations of individual riflemen, Dr. Scott has gained more renown by his individual shooting than any of those who visited us this year. Others have shot up to all that was expected of them, but in mastery of difficult winds and in firmness of exciting competitors, Dr. Scott has established for himself a reputation both at Dollymount and Wimbledon. If his consummate judgment was accompanied by a little more promptness, he would be perfect as a long-range shot. He is unfortunately deluded at times, and those squadded with him have been the losers. Dr. Scott's success here is a number of the Spencer cup, second prize in the Abercorn (second prize in the Abercorn), and a number of the other prizes. At Wimbledon he achieved the unusual feat of capturing first prize in both stages of the Albert. Jackson was very successful in individual competitions, taking first prize in the Abercorn. Farrar won the Wimbledon cup and other prizes. Brown won the amateur cup at Wimbledon. Col. Clarke did not compete after the match at Dollymount, and Mr. Rathbone shot but little.

A word in conclusion as to rifles. It is not quite true that I was the first to use a breech-loader since 1876. I certainly tried many desultory experiments, but until the acceptance by the National Rifle Association of America of my invention, issued last winter, the Rigby breech-loader did not exist. I at once put my plans into shape, and set to work to make the rifles. Every gun that I had made up to that time, numbering eight in all, and those, for want of time, in an unfinished state, were in the hands of the team and reserves on the 20th of June. We had not at that date a spare rifle, if I recall rightly, and had to call on me to shoot, but every one of them did their work well. It cannot be denied that I considered a really fair trial of my system, seeing that each of the Americans had their choice of more than one rifle, and had with him at least one with which he was perfectly familiar and had proved in all weathers. Yours respectfully, JOHN RIGBY, Dublin, Ireland, Aug. 7th.

THE AMERICAN-CANADIAN MATCH.

CARROLLTON, Aug. 16th.—The match to-day between the Canadian small-bore marksmen of the Victoria Club and the picked team of the Amateur Club, of New York, was shot to-day and resulted in another victory for the Americans, and maintains unbroken the series of American team victories in all the international matches so far. The Canadian team remained at the widow Klein's hotel, near the range, Friday night, and rose early in the morning to prepare for the day's work. The American team, under the command of President R. H. Keene, its captain, went early to the range, and the members of the team were all in good health and in excellent spirits. The range was white with daisy tops, which dazzled the eyes like snow in the morning sun. Long green lanes extended down the field from the several firing points to the targets, indicating the track of the mowers, which had cleared the paths for the rifle bullets. The light was bad for shooting, however. The sun shone brilliantly for several minutes, and then a passing cloud shaded the field. President Keene and Lieut. Col. Gibson, captains of the American and Canadian teams respectively, assembled their teams at the 800 yards firing point at 10 o'clock. The captains tossed a coin for the choice of targets, and the Canadians won. They chose targets O and V, the Americans took the targets adjoining Standard V1, on the right of the Canadians. There was no referee and no watches sent to the butts. A. H. Cobb and Secretary Minor, of the Amateur Rifle Club, spotted the dots on targets O and V, respectively, on behalf of the Amateur Club. President Keene declared the match open at 10:07 o'clock. The American team was squadded as follows: Lieut. Col. Clark, J. E. Watters, R. H. Allen on target Standard V1, and Lieut. Col. Clark, R. H. Rathbone, Col. H. S. Johnson, and L. L. Hepburn on target V1, with L. DeGuer, of Hudson, as spotter; Lieut. Col. Gibson, Joseph Mason and Albert Park on target

third the money; third prize to Snow Flake, entrance fee returned. Thus ended a disastrous and very unsatisfactory race,

The Kennel.

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ULE,** taking effect March 11th, 1890.—Leave
HUNTER'S PT (Flatbush Ave., B'klyn, 5 min.
earlier for—
Babylon, 5.35 A.M., 3.35, 4.35, 5.35 P.M. Sundays,
9 A.M.
Col. 1st & Whitehouse, 7.35, 8.45, 10, 11.35 A.M.,
2.35, 3.35, 4.35, 5.45, 6.45, 7.45, 8.45, 9.45, 10.45 P.M.,
12.15 night.
Sundays, 9.35, 10.35 A.M., 1.35, 3.35, 7, 10 P.M.
Fishing, 6.35, 8.35, 8.45, 10, 11.35, 1.35, 3.35,
4.35, 5, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.
Sundays, 9.35, 10.45 A.M., 1.35, 3, 5.35, 7, 10 P.M.
Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M.
Rockaway Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M.
and 6.45 P.M.
Great Neck, 8.30, 7.35, 11.35 A.M., 4.35, 5.35, 6.35 P.M.
Saturday nights, 12.15. Sundays, 9.35 A.M., 5.35 P.M.
Garden City, Queens and Hempstead, 8, 10 A.M.,
1.35, 3.35, 4.35, 5.35, 6.35, 7.35, 8.35, 9.35, 10.35, 11.35,
12.15 night, except Sunday, and from Hunter's Point,
Monday, Wed., Fri. and Saturday, 12.15 night,
Wednesday and Sunday only from Flatbush av.
10 P.M. Sunday, 9 A.M., 1.35, 6.35 P.M.
Glen Cove, Locust Valley, Glen Head and Ros-
eton, 9 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Sundays, 9
A.M., 4.35 P.M.
Greenport and Sag Harbor, 8 A.M., 3.35 P.M.
Huntington and Northport, 8, 10 A.M., 4.35, 6.35
P.M. Sundays, 9 A.M., 6.35 P.M.
Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M.
Port Jefferson, 10 A.M., 4.35 P.M. Sundays, 9 A.M.,
Patterson, 8.30 A.M., 4.35, 5.35 P.M. Sundays, 9
A.M.
Richmond Hill, Glenade, 8.35, 11 A.M., 2.35, 4.35,
5.35, 6, 7 P.M. Monday, Wednesday, Friday,
Saturday nights, 12.15. Sundays, 9 A.M., 6.35 P.M.
Credenthor, 8, 10 A.M., 1.35 P.M., Tuesday, Wed-
nesday and Saturday, commencing April 3d.
HUNTER'S PT & WALL ST. ANKER.—Leave
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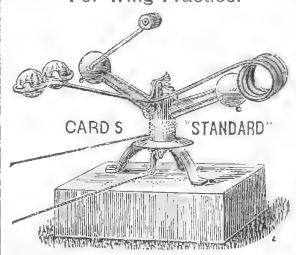
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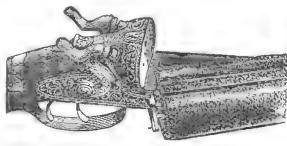
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NEW YORK, THURSDAY, AUGUST 26, 1880.

Volume 15—No. 4.
Nos. 39 and 40 Park Row, New York.

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FOREST & STREAM

NEW YORK, THURSDAY, AUGUST 26, 1880.

FISHING AT THE RANGELEY LAKES.—We hear from the Rangeley Lakes excellent reports of the trout fishing, which is said to be exceptionally good this season. September is the month in which the largest trout are usually caught, and though we do not altogether approve of taking the fish so late, as they are then preparing to spawn, there is usually a rush of fishermen to the lakes in the early fall. The Boston and Maine Railroad, in another column, publishes a schedule of fares which may be of use to some of our readers.

A FAST YACHT.—Mr. Jas. G. Bennett's new steam yacht Polynia has turned out an exceedingly fast vessel. She beat the famous little Leila, of Bristol, last Thursday in Narragansett Bay. As the Leila is easily good for nineteen miles, the Polynia must have been making twenty, and, as she was not crowded, twenty-one or twenty-two are within her capacity. This makes the Polynia at least an eighteen knot steamer, and probably the fastest steam yacht in America.

—The suggestion of a correspondent that the stations and baggage cars of the railroads entering New York be posted with the law prohibiting the carriage of snared game and game killed out of season, is simple, sensible and practicable. The plan, if adopted, will undoubtedly do very much to lessen the traffic in this plunder. Let it be tried. It will at least accomplish more than an after-dinner speech.

THE AMERICAN ASSOCIATION MEETING.—The twenty-ninth meeting of the American Association for the Advancement of Science commenced yesterday at Boston. This meeting, of which Mr. Lewis H. Morgan is President, promises to be very largely attended and very successful, and we shall hope to give some particulars of it in next week's issue of FOREST AND STREAM.

HOW TO STUDY NATURE.

HUXLEY modestly calls his book* an introduction to the study of zoology, but the reader who obtains a few crayfish, or crawfish, as we Americans prefer to call and spell it, and takes note of their outside appearance as described by the author, and afterward dissects them according to the very plain directions laid down, will find himself a zoologist by the time he lays the book down, and will then be qualified to take up a bird, beast or fish, and describe it, or at least understand it, its structure, movements and all that comes under the observation of a trained naturalist. O that such a book had been written years ago! What months and years of pottering it would have saved us! The common crayfish of our fresh waters is a most wonderful animal to those who study it first, but it is not a bit more wonderful than others, and its study will only prepare the student to go further; will tempt him, in fact, and he, or she, will find the desire to learn more grows and takes possession of one like an evil habit. This book, written by one of the greatest living zoologists, is a valuable contribution to our small list of really good primary zoological text books, and the story is most simply and charmingly told, being as free from all strange terms as it is possible to be and yet be explicit, although, as a matter of course, the reader must learn a few names of parts of whose existence he was before ignorant. He begins by telling us that many persons seem to believe that what is termed science is of a widely different nature from ordinary knowledge, and that the methods by which scientific truths are ascertained involve mental operations of a recondite and mysterious nature, comprehensible only by the initiated, and as distinct in their character as in their subject matter, from the processes by which we discriminate between fact and fancy in ordinary life, and that what is called science is only that common sense which sees things as they are, or, at any rate, without the distortions of prejudice, and reasons from them in accordance with the dictates of sound judgment.

After giving a description of the external parts, accompanied by a plate on which letters refer to the names of the parts, its movements, food, habits, method of capture, etc., he says: "Thus far our information respecting the crayfish is such as would be forced upon any one who dealt in crayfishes, or lived in a district in which they were used for food. It is common knowledge. Let us now try to push our acquaintance with what is to be learned about the animal a little further, so as to be able to give an account of its natural history," etc. And thus he leads the reader along into the mysteries of the structure, of its shell or exoskeleton, the attachment of its legs and swimmerets, its jaws, gills, circulation of blood and its digestive and generative organs, until finally there seems nothing more to be known concerning the individual.

It must be borne in mind that it is the common crayfish of Europe which he is describing, and that we have several species in different parts of our country which differ in shape of claws and other particulars which are really unimportant as the European animal is the type of the family, and although the common crayfish is the title, and its life history and structure the main part of the book, all the relatives of the animal, such as shrimps, lobsters and crabs, are considered, and their peculiarities treated of, so that one gets a good idea of all the crustacea at the same time, and getting it, so to speak, from the fountain head, he is sure that what he is learning is what is accepted as truth by scientists in all lands.

We have had so much stuff offered to the public as popular natural history, which was compiled by men who did not even know who was good authority and who was not, that we regard it as the sign of the beginning of a new era when men like Huxley begin to write books for the people instead of only for the learned. The publish-

*The Crayfish, an Introduction to the Study of Zoology, by T. H. Huxley, F. R. S., with eighty-two illustrations. [New York: D. Appleton and Company, 1, 3 and 5 Bond street, 1880.]

ers (Appleton & Co.) have published many of the works of modern scientists, but we doubt if any volume of their "International Scientific Series," of which the present volume is the twenty-eighth, will do more toward awakening an interest in the study of the life by which we are surrounded, and a knowledge of which is really necessary in order to form an idea of man's place in nature, than the present one.

THE FALL MEETING PROGRAMME.—The very moderate and unpretentious list of competitions for the eighth Annual Fall Prize Meeting at Creedmoor has been issued and may be found in our rifle columns. There is plenty of variety in the competitions, however, and riflemen who shoot for the pleasure of the art may find plenty of chance for enjoyment in the few days of the meeting. Reduced into plain, hard figures, the prize list is a meager affair; very much so. There is nothing to tempt the grubbers for gain, who make the rifle a lever for their purposes of self-enrichment. There are simple badges whose value ranges far above their intrinsic worth in the eyes of their holders, because they represent an achievement, a victory won, and a struggle successfully gone through with.

With the true sportsman's idea in the minds of the contestants, it would be sufficient to prepare a programme of matches to secure a roll of entries. If it is necessary to bait the programme with a liberal prize worn, or to sugar-coat the shooting conditions as though the match were a nauseous affair only made endurable by an addenda of liberal prizes, then it were better that no match should take place. The National Rifle Association is not fulfilling its object—the encouragement of rifle practice—if it is only to act as tub-monitor for a set of greedy cormorants who flock about to pick over the good things of the feed set before them. The programme for the September meeting will afford little satisfaction to these gentry. To lead in a match brings honor, but little profit, and this as it should be, if we are not to have the logical result of liberal prize lists as instanced in the recent Wimbledon false-marking scandal. The prospect already points to a good meeting. The meeting between the regulars and the militia will be more nearly on an equality than at any previous time. The men of the army have been working up, anxious to show the people generally that they, as professionals, are not ridiculously behind the amateurs of our State regiments. The meeting gives promise of good management under Col. Bodine, and, with a fine spell of weather, there is a prospect of a deal of good work in the several contests.

FAIR DEALING FOR SPORTSMEN.—The letter about Cobb's Island is a sufficient reply to our request that its author should tell us about the present accommodations there for sportsmen, and our Poughkeepsie correspondent is doubtless as much pleased as we are ourselves to have such an explicit account as that given by "Chasseur." Cobb's Island is not by any means the first place which has ruined its greedy managers and obliged them to come down to a reasonable scale of prices. We never knowingly recommend to our readers a place where extortion is the rule; but now that the landlords at Cobb's Island have reformed in this respect, we can indorse all that is said in praise of the spot to be had there. The columns of the FOREST AND STREAM are always open to praise of resorts which deserve good words, and to the exposure of other places where the sportsman is fleeced; and it always means to ascertain the true condition of affairs and do justice to all. We will thank our correspondents at all times to bear this policy in mind and to aid us in carrying it out.

—A Baltimore child clairvoyant has discovered the North Pole, which she describes as an island, full of tropical trees and flowers. There are also vast herds of monkeys, ostriches, swans, geese, ducks, quail, robins and humming birds. Rather an inviting field for a good dog and a breech-loader. Perhaps when the other game fields of the world are exhausted, the sportsman may be "first in" at the Pole.

The Sportsman Tourist.

CAMP NOTES.

BY ROBINES.

[Continued from page 46.]

WALKING along the mountain road, admiring the lovely wild flowers and the immense moss-covered rocks over which water is trickling to bathe and refresh the arid granite, I am suddenly reminded that I take the path worn smooth by the wandering and grazing cattle, whose bells are heard tinkling not unharmoniously here and there, and following in its numerous windings down the mountain side, come suddenly upon the long, still pool where the trout I am in search of has his abiding place. There, under a large boulder in the middle of the pool, is his lair, from which position he rose, and missed my fly, the day before. He's a rouser, and a wary old fellow, smarting under the remembrance of sundry pricks from the fishermen in camp, and must be carefully approached. I start in at the foot of the pool and wade carefully toward the rock, never taking my feet from the water, to avoid a splash that would send wavelets up the pool to notify him of my coming. I am within a hundred feet of him, and commence to cast my line toward the spot, approaching gradually, and unreeling the line the while to give the longest cast of which I am capable. Presently the flies are scattering over the very point I would have them; and as they alight upon the water softly, gently, every nerve thrills with expectancy and excitement. There is a small ripple seen, then an involuntary strike, and a miserable little black-speckled club is reeled toward me. He is contemptuously disengaged from the hook and thrown ashore, where the white remains thereof form a link. Floor one will "talk to himself" when thus alone upon the stream. Many interesting conversations have I held with birds and trout, and quite entertainingly have they replied to me. My flies are again in the air; the line is lengthening, and the next cast will send them to the very spot. There they light again, but no response rewards my endeavor. I cast all about the rock, under the neighboring bushes, near the head of the pool, making the white and luminous, but fruitless, to say he does not show himself. I talk to him, telling him what a beauty he is, and how provoking it is in him to thus secrete himself; but never a fin does he show. I finally conclude he has discovered me, and he being the particular fish I am after, with nothing else to do, I wade carefully ashore, sit down upon a mossy rock, with feet dangling in the water, lay down my rod, light my pipe, take out my note book, and jot down what I see, saying that while thus engaged my victim may exhibit himself in feeding on the natural flies that are bobbing over the water.

What countless living creatures one encounters when sitting thus quietly in the woods. Birds hop about in the branches overhead, twittering and chattering to one another while looking down upon you in a comically suspicious manner, almost asking you what you are up to, anyhow. Fly-catchers dart from the trees, and with unerring aim capture the moths and flies that are skipping about. Kingfishers dive for minnows and nowts close by your feet, throwing water in your face from their plume. Highholds regale their young with grubs that they bring momentarily from a neighboring meadow. Little speckled woodpeckers search for insects and larvae in the bark of the surrounding trees, giving few grunts of satisfaction, excepting when they tap upon their barbed tongues. Frogs of all sizes, with voices from that of a deep baritone to the shrill treble, give out their single, jerky notes as though fired from a pop gun. Butterflies take their tortuous flight through the dense thickets and over the tree tops without ever touching a branch—a feat that would seem impossible as you look upon their course. Gnats, punkies, mosquitos and flies alight upon your nose and hands, taxing your fortitude to the utmost in avoiding capture, though that you may not frighten away the birds. The mosquito, like the rattlesnake, gives warning before he strikes, but the punkie is a contemptible copperhead, biting before declaring himself. Ants and brightly-colored beetles scamper across your paper, arresting your writing that you may scrutinize and admire them. An ant is a colporteur of no mean description. He can carry many times his own weight, but is a confounded fellow, that you may see. He never turns aside for any obstacle in his way, never seems certain as to where he is going nor why. I have just been watching one back up a tree with a dead bug in his mandibles, which he has dragged from twenty feet away, changing his direction more than a thousand times. What he will do with the beetle when he lugs him down on the other side of the tree no mortal can foretell. There is a sucker, almost within reach of my finger, as he pokes listlessly about over the bottom of the creek, sucking sand and mud into his long snout, and immediately spitting it out again, causing a dirty cloud all about him, and then moving on, overturning sticks and rooting under stones, forever looking for something that he never finds, aptly reminds me of men seen upon our streets at home, lounging about the corners sucking filthy clay pipes and expectorating tobacco juice about for their betters to walk in, then moving on to get out of their own filth and to bespatter and nasty a new neighborhood. While observing the sucker a muskrat has quietly taken a seat on the very rock under which my trout is supposed to be, confound him! There he sits, unconcernedly breakfasting on a bunch of clover which he has brought with him. Now he swims gracefully down the pool, climbs upon an old log, and washes his face with his black paw. There he will play and brolle within reach of my rod until I rise, when in a twinkling he will be gone, and, for the life of you, you cannot tell where. He has the power of becoming invisible in clear water not possessed by any other creature of my acquaintance. I note the wood robin (*Turdus melodus*) does not adhere to his accredited time for singing. He is thought to give forth his exquisite melody only early in the morning and late in the evening; but here I have seen him at the bottom of the stream, just below me, by the water's edge, I hear a plaintive, pleading cry of some creature in distress. I must see what it is, even at the risk of disturbing the trout and driving away my inter-

esting friends. No one should fail to respond to such an appeal as that. Poor froggie! it's you, is it? And that ugly water snake has you by one hind leg. Cause enough for alarm and that will do for once. While I search for a stick the snake warily endeavors to withdraw the frog so as to get his head in his mouth. The frog resisted desperately, kicking with his free leg and calling on me pitifully for help. It came with a whack over his snake's back that sent him writhing into the water and set froggie free, who made some marvelous leaps down the bank and disappeared under a stone in the pond without waiting to express his thanks for the rescue. While returning to my fishing apparatus at the margin of the pool, and not seeing me, occupied himself in overturning stones with his great black paws. He seems to be searching for larvae and crabs, for momentarily he sits erect and conveys something to his mouth with both paws. Having examined the shore upon his side of the pond pretty thoroughly, he looks anxious to retire, scrutinizing the premises as though anxious to investigate that issue. To my surprise he enters the water and swims directly toward me. He is an ugly-looking chap, but quite a graceful swimmer. As he nears the shore I wade out to meet him, at which he does not exhibit the slightest concern. His quills all lay smoothly upon his back while he swims, and he seems to be unable to erect them when I poke him with a stick. Evidently I have him at a disadvantage. I thrust him under the water; he turns over once or twice from the pressure of the stick, and rises almost exhausted to the surface. He's the most helpless creature for so large and homely a one that I have yet formed an acquaintance with. I am tempted to grasp him by one of his hind feet, but am dissuaded by the close proximity of his bushy, bristling tail, and push him ashore, where he lies utterly used up and grunting as though in great distress. Soon he revivifies, shows a disposition to crawl into the bushes, and touch him with a stick, when instantly the quills upon his back become erect, every one standing in an opposite direction from his mate. Had the creature been dipped into a pot of glue, and a peck of quills emptied over him, a representation of his appearance would be complete. Try as I would, I could not touch his head, which he kept well under his body, and turned his tail toward me as I attempted to look him in the face. Touch his head and he would turn his head, and in direction in a manner that caused me to congratulate myself upon the stick and not my hand received the blow. Having played with him to my satisfaction, and concluding he would never make a "bosom companion," I left him to scramble into the thicket while I once more regained my seat on the rock.

Scarcely had I noted my interview with the porcupine in my note-book when the very trout that I had been waiting for broke, almost under my nose. There he is now, with his quills erect, his side toward me, upon which every vermilion spot is plainly distinguishable. His tail moves slowly from side to side and his pectoral fins fan the water continually. Even his coneshap'd pupil can be seen, so close is he. What a beauty he is! He seems conscious that a foe is near, for his eye moves restlessly, and he makes several hesitating motions as though he would like to capture a natural fly that is fluttering about near him. He starts backward suddenly, then returns to his position again, evidently with one eye on me and the other on the insect. I sit motionless, and cautiously and slowly reel up my line until only the leader hangs from the end of the rod. I wait, and when at last he darts at the insect that has been enticing him, making the water boil as he engulfs it and swiftly returns to his old position. I conclude my time for action has arrived, and tremblingly extend my rod and drop the end fly upon the water, just over his head. His fins vibrate more rapidly, his tail moves but slowly, giving a peculiar spiral motion to his body; he starts toward the bobbing fly, then turns back again; he comes again, this time with more determination in the movement, and I hold my breath and tremble in every muscle with a feeling that my body will fly to pieces if he keeps fooling with me much longer; he turns swiftly, just as I come within reach of him, and concludes "he won't." A sigh of relief, mixed with disappointment and a feeling as though I could leap into the creek and end the contest. The trout still moves about restlessly and watches the fly. He makes sundry feints at it, which sends my heart and lungs into my mouth, almost suffocating me. I swallow them as best I can, when he turns away and swims on, bobbing desperately. A surprising, incautious movement of my arm, approval of release, it takes proves true and strong. No use in your shaking your head at that manner, old fellow, you must come to creed this time. Steady, there! You shall not reach that stump—that will never do. Whoa, just missed it, by gracious! Well, you are a lively chap; want to get under that rock, hey? let us see about that; just pull in the spring of the rod a while, and we will see who is the strongest! Ah, ha! that brings you to terms, doesn't it? Ready to capitulate? Very well, just let me slip this landing net under you. No! All right, try it again; but that brush heap you shall not reach unless you break my well-tried bamboo. Tired again after that spurge, are you? Well, we'll try the landing net once more; let me reel you in a little first; there, now you are within distance. What a beauty you are, and what a pity it is to take you from the fishing pool! How your silver sides reflect the colors, and as I lead you into the sunlight how you change to gold and ruby and emerald and—bless me, every other color worth admiring. What a bright carmine your fringed gills are, and how your pink tips harmonize with your general "make up." A noble fight you have made, my dear fellow, and a very handsome fish you are. There, rear upon that log of mine, and I will be gone. I have a mate under the willows yonder; for, from the manner in which he is just now splashing about, I conclude he can be made to keep you company. Then, what a handsome

brace you will be to exhibit to the campers as trophies of my morning's work.

What a picture is revealed to me as I wade out into the stream. To the left, a rock-bound shore overhung with long grass, hemlock and water-beech. Through them are seen the rhododendrons, their pink and white, long, slender, peeping out everywhere. In front, a miniature falls gracefully rippling and winding among and over moss-covered rocks. Beyond, a smooth sheet of water, under which every stone and pebble can be seen, and from the quiet surface of which the mountain and sky is clearly reflected. To the right, willows with their yellow foliage, evergreen spruce and hemlock with their darker shades of green. Along the bank, a decayed log, completely covered with moss, and through which delicate ferns are growing; behind it, in swampy ground, a cluster of cardinal flowers (*Lobelia cardinalis*), almost a month in advance of its regular blooming time, and whose bright scarlet blossoms appear all the lovelier by reason of the becoming background of tall green timothy stalks that wave to and fro in the gentle breeze. Daisies, with their round, full faces—so suggestive of good humor and jollity—abound everywhere. No glen is so dark for them, no meadow too light, no sandy plain too hot or dry, no swamp too wet or cold; the ever cheerful daisy looks up at you from meadow, hill and dale; among the first flowers to greet you in the spring, the last to bid you adieu in the fall. Bless the daisies! In the meadow I see tall purple plumes of the iron-weed (*Fernoxenia*), *horreorum*, and wild sweet william (*Phlox maculata*), with sprinklings of yellow and gold from the buttercups and primroses (*Prinula occidentalis*). The air is fragrant with the perfume of the now blossoming milk-weed and musical with the warblings of the thrushes. Overhead, through the graceful branches of the trees, the clear blue sky, with white and fleecy clouds wafted hither and thither to suit the temper of the wind. What a scene! How I wish for an artist to catch upon paper and let me free to catch that trout!

Halloo, what sound is that? I hear it once again in an echo against the opposite mountain, to be repeated all along the valley, when I recognize a blast from George's horn. Hark! there it comes again, in three long blasts—a signal that dinner is waiting, and then two short notes to tell me that company has arrived. I cast hither and under the bushes and have a rise, at which I strike nervously, and carry away the upper lip of the fish, freed from the hook, darts out into the pond and rises within easy view. He rubs his nose against a stone, opens and closes his mouth, winks and blinks and seems to be meditating upon the situation; or, perhaps, wondering what sort of an infernal fly could carry away a fellow's lip. Just then he got a glimpse of me, and darted up the pond like a rocket, and was gone. Concluding he had enough of me for that day, I veiled up my line, climbed to the mountain road and hurried into camp.

RAIL SHOOTING ON THE DELAWARE.

CHESTER, a town of some commercial importance, situated on the Delaware River not far from Philadelphia, is now, and has been for years, the headquarters for sportsmen devoted to this kind of shooting, and there are many fond of the pursuit of upland birds—woodcock, grouse and quail—and again many to whom the (to me questionable) excitement of shooting ducks, others, there are some who are devoted to the pursuit of years and years in succession are to be found at the place season at Chester, as eager for the sport as though it combined all the attractions of both.

The best time for shooting occurs during the high tides of the full September moon, for, other things being equal, the higher the tide the larger the bag.

Having obtained a "pusher" at Chester, you start about an hour before the tide begins to cross the river to the flats, and are pushed by yoked-up boatmen as the reeds as the tide allows you to go. With your dorky pusher at the stern with his long pole, you stand firmly braced in the bow. If you do not get excited, the chances are, if you are a tolerable shot, that you will kill almost all your birds; but, as for retrieving them, that depends on your boatman. Left to yourself, you would not land one-half the birds that you would with a pusher.

You may think you mark the birds down, but the bunches of reed are so much alike that two to one you never see your bird again, although he may not be a foot away, clinging to some hidden weed with but the end of his little bill above water. But, with a good pusher, whose eyes are accustomed to discover the minutest difference in the color or size of a reed, you will probably lose but a few birds, except wounded ones, which you may as well give up at once. Apart from the natural repugnance of a true sportsman to kill and not retrieve, you will do better to leave them, for in the ten minutes you consume in searching you may shoot five or six birds. The time of shooting does not exceed three hours a day; but the immense quantity shot in that time would make one think that the birds would soon be exterminated. Not so, however, for although it is not unusual for a single day to bring in a hundred or more birds, and the flats during shooting hours are covered with boats, yet year after year the rail is found seemingly in numbers undiminished from the thousands of shots daily fired and great quantities of them killed.

The one great drawback to this kind of sport is the danger. This is great, and one careless shooter sometimes spoils the whole day's pleasure for many. As the birds are so much in nature near the water, and the position of the shooters is but poorly deflected by the poles of the pushers, as might be expected with so many shooting at once, many accidents have occurred. The low flight of the birds is another cause of danger, and a careless shot is often followed by a shout from another boat issuing from some poor fellow whose skin tingles, even if he be lucky enough to escape without serious injury. There is some safety in the pusher, for as you are in the reeds, but can show the shot marks on his person, but, as they say, they soon get used to these little irritations (occurrences). A trifling occurrence it was not, however, to one whom I saw lose his eye in this way.

Taking it all together, the danger run more than overbalances, in my mind, the pleasure of shooting on the flats.

However, as a means of relaxation, if one is willing to incur the danger, it will help to pass the time between seasons. The birds, when shot, are small and hardly worth

powder and shot when compared to the birds of 'our uplands': but there are those who consider the rail as only inferior to the red-bird as a delicacy for the table, and we must confess that a nicely broiled rail is not to be sneezed at.

If you go rail shooting do your best to be "high boat," i. e., kill and bring home the most birds, and ever after you will linger in the remembrance of the pusher, for it is something added to his reputation to have "high boat," and the chances are if you ever go again you will be received with a welcome.

D. F.

ALL ABOUT COBB'S ISLAND.

WARRENTON, Va., Aug. 13th, 1880.

Editor Forest and Stream:—

I see, in your last issue, a card from a Poughkeepsie man disputing my account of Cobb's Island, and rather sarcastically asking for further information. For his benefit, as well as your sportsmen readers, I will give a brief history of the famous sporting resort.

Many years ago—when you, I and the wearied reader—who revises this were boys—that there dwelt in a shanty on a barren sand bank, that had risen, like the failed Isle Calypso, from out of the depths of the ocean, a rough, weather-beaten fisherman named Cobb, who gained his living by casting his nets as well as shooting ducks, wild fowl and geese, vast quantities of which, in the winter, flocked to the great Broadwater region lying near. When he first bought his domain it was but four or five acres in extent, and the price paid was \$30 in gold and ten bags of salt. Never was money ever placed to greater advantage, for Old Neptune, generally so merciful and generous, and who remitted his gifts in much of that garnered wealth that is seeking other climes—yet sometimes in his royal humor gives a royal gift—and this simple fisher, like the one in the Arabian Nights, was in luck. Day by day, hour by hour, by the ceaseless, restless action of the waters did his island increase; and nature, to ward off all danger of its being swept away by a tidal wave, formed breakers, in the figure of a half moon, that broke the strength of the northwest waves, and shattered them into harmless foam when they struck the shore. It is a sight to see those billows in a high wind—racing one behind another like crack horses strung out in a sixteen mile race—coming in on the home stretch, and then dashing themselves against the bar with a noise like the booming of distant artillery. In calm weather it sounds like a monody played in low numbers, and

"The league long roller thundering on the reef"

seems a requiem to many a poor fellow who sleeps his last sleep on the island, for Cobb's Island soon became a wrecking station. On this dangerous coast many a stately vessel has been dashed to pieces and their crews drowned in the vicinity of this island. Indeed, the old man Cobb and his stalwart sons made many thousands of dollars salvage from wrecked vessels, as well as rearing a mob.

In one ship alone, that went to pieces on the island, their share of the profits of the cargo they saved amounted to \$8,000. All that is over now, for there is a United States life saving station on the island, under charge of Mr. Crump, who, by the way, is a genial, fine-souled fellow.

Time passed on—as time, that maddest of wags, will always do—and from a little sand bank of only a few acres, old man Cobb found himself possessed of a domain of several hundred acres. Trees had grown up, gardens were laid out, and his boys, becoming men, became, as was natural, ambitious; and disdaining the humble life, and its sure but slow gains of their progenitors, they determined to spend the few thousands they had earned in their dangerous calling by flitting up a watering place. They built a hotel of that rambling style of architecture known as the Virginia tavern, also a few cottages. A wharf was constructed, a tugboat purchased, and hiring guests from Chesterton, and then the place was thrown open to the public. A great rush ensued, and the island, from its varied attractions, soon gathered a large crowd.

My first visit to the island was four years ago. I was then the Southern correspondent, as well as writer of sketches and tales, for the FOREST AND STREAM, and if the gentleman from Poughkeepsie will turn to its columns he will find that I was sparing in my denunciation of the management of Cobb's Island. In truth, affairs were in bad way. The Cobbs themselves, not fitted by education or training to run a watering place, got a man by the name of Segar to conduct it; and he conducted it on the Boss Tweed principle. He actually did not keep account books, and the Cobbs were in profound ignorance of the outlay as well as the income, and the profit and loss were utterly unknown to them. Under his sway Cobb's Island became almost a robber's den, and woe to the unlucky sportsman who fell into their clutches. All, from the chief clerk to the lowliest footman, were plundering him. It was legalized robbery. They did not point a pistol at the guest's head and cry, "Stand and deliver," but they got his money all the same. The habits of the island behaved in the polite way of the Spanish bandits, who, when they see an unwary traveler journeying along all unconscious of danger, prepare an ambush for him, and suddenly the startled pilgrim is brought to a halt by seeing a dozen huge belted-mouthed blunderbusses pointed at his body, while a voice, in persuasive accents is heard crying: "Charity, my dear stranger; for the love of God, charity." Then the charges charged the sportsman, as the Poughkeepsie man observed, \$5 per day, and even more, if they thought they could bleed him, and besides, they took half the game he killed; everything was extra, too, and charged accordingly. It was simply outrageous; and as a journalist I fought tooth and nail against Segar's administration of this sportsman's paradise. I started the Virginia press in crusade against this seaside resort that was swindling the public; and also in the FOREST AND STREAM I denounced the place, and did more than any one person to break up that disgraceful ring.

Two years ago the whole concern burst. Mr. Segar left with some ten thousand dollars, the Cobbs told me, that he grabbed as his share, leaving them literally nothing, nay, leaving them deeply in debt. In perfect disgust the Cobbs threw the whole thing up. They sold the tugboat and the other property, and then to their occupation of oystering, hunting and fishing.

Last year Tom Spady joined with the grandson of old

man Cobb and reopened the place in a quiet way, and, being a sensible man, he has remedied all the former abuses. There is absolutely no extortion, and everything is open and without guile. The rates of board are cheaper than any resort on the Atlantic coast, being \$30 a month, \$12 per week and \$2 per day. So far from the guides charging sportsmen anything they want, there are printed schedules of prices hung up all over the hotel. I copy one:—

Guests desiring guides will find the following prices:—	
For shooting on a tide, one person.....	\$1 50
For shooting on a tide, two persons.....	2 50
For fishing, each person.....	2 50
For sharking, each person.....	75

SPADY & COBB, Proprietors.

Thus it will be seen that the charges are very reasonable. The guides furnish everything, decoys, boats, etc., and as each hunting trip lasts several hours, generally a half a day, they earn their money by the hardest kind of work. I know of no manual labor that is equal to their duties of crouching close behind a blind on a salt meadow, with the blazing sun beating down, to strain their eyes to catch sight of the birds, so as to whistle them to the decoys, and always blindfolded by the dazzling glare, and then chasing wounded birds, often waist deep in water. All this in cold blood, they not having guns, and, of course, not being braced up with the excitement and stimulus that the shooter feels.

In the winter the board at the hotel is the same as the summer, and the charges for a day's duck and geese shooting is \$3 per day; and never once during the last summer or this did the guides claim any of the game killed. On the contrary, they would cheerfully pack them in ice and send them off as directed, forwarded all the birds killed to friends, and heard no protest. I know it is but right as regards winter shooting, that the shooter should have all the game he kills. If I see a disposition in any public place to victimize sportsmen I would be swift to brand it through the press.

The guides at Cobb's Island, for the most part, are good-natured, kind, and, as I wrote in my last, thoroughly honest. I have often left valuable things in the boat, and totally forgotten them, but they have always been returned.

There are all kinds of people in this world, a remark you have probably heard before, and there are various grades among the sportsmen, as well as any other class, and I have seen some mean men among the hunting fraternity. Why, down to Cobb's Island, about three years ago, there came a party of five, and they were so parsimonious that they would not patronize the bar, but I bought their whiskey by the bottle, and actually slept five in bed.

And now, having explained myself (I hope to the satisfaction of everybody), as Captain Cuttle would observe, "I had my say, and what I say I stand to."

CHASSEUR.

THE EAGLE AND OTHER LAKES OF MAINE.

IN your issue of Aug. 12th, A. F. J., New York, asks for information, "in regard to trout fishing in the Eagle and neighboring lakes," how to get there, etc., etc. Having made the trip myself, I shall take pleasure in answering him by letter, if he will address me. I wrote up the trip fully for the ROD AND GUN, and now have it in my scrap book, but I cannot retain the date of its publication, and cannot refer him to the number it appeared in. It was entitled, "Moosehead Lake, Penobscot River and Beyond." The trip was made in June, 1876, and appeared shortly after in the ROD AND GUN. The trip is a very pleasant one, and easy to accomplish. It is about forty-two miles from the north end of the carry from Moosehead Lake. The carry itself is two miles long from the upper end of Moosehead. Said carry can be reached by steamer from Greenville or Kineo, and teams can be had there to take your canoe over to West Branch; here you will find "Joe" Morris ready to entertain you over night, and you can start down river early in the morning. You can easily reach

ROCKY RIFTS,

about fifteen miles, in time for dinner. Here you will encounter turbulent water for some twenty or thirty rods—dangerous, unless your guide knows his "biz"; otherwise, safe and exciting to run. Four of our party "did it," and found it delightful. The carry over to West Branch spreads out into Chesuncook Lake, where you find a small settlement, and where you can get entertainment. You next turn your face northward, and run up stream up the Umbagogous River, some seven miles, into the Umbagogous Lake, crossing the south end of the same. You strike, after a mile's paddle,

MUD POND CARRY,

the worst carry in all Maine, about two miles in length. Everything must be "toted" here, so you had best go light through mud, which is generally to be found on this carry. Half a mile across Mud Pond takes you to the outlet, and a mile and a half then leads you into Chamberlain Lake, a body of water some fifteen miles in length, by three in width. Crossing this lake, diagonally (some four miles), takes you to Chamberlain Farm, where sportsmen are always welcome. Three miles northward, following the eastern shore, and you reach "The Locks," which, passing through, takes you through a connecting ford, some two miles, into Eagle Lake.

From Eagle Lake a very pleasant trip may be made through the Allegash into the St. John River, and thence down to Woodstock (via Grand Falls) or St. John, N. B. This trip has been often taken by sportsmen. From Morris it may be easily done in ten days, or even eight, with smart guides. We made our trip from Moosehead to Eagle Lake, and return to Moosehead, in five days, without feeling spent, and only a day's fatigue. But you have to keep moving to do it, and guides don't much like it, and will likely tell you "it can't be had."

Regarding the fishing, you will have no trouble in the fishing season in catching all the trout you need to eat, but you will not find them as plenty as at Moosehead and its tributaries, nor as large. Good guides, however familiar with the waters, will find trout always in the season.

The best guide I know of to take the trip with is Capt. Samuel Cole, Greenville, Maine, which, by the way, is a good place to start from, and where other good guides

may be obtained. At Kineo House, also, you will generally find plenty of guides, if you write in advance to the proprietor of the Kineo House, Greenville, Maine. Be sure, however, you get at least one guide who is familiar with the route, and that all your guides are expert river guides, otherwise you may find your canoe bottom up, as canoeing in quick water is quite a different affair from canoeing in a lake. Good river guides will charge you from \$3 to \$3.50 per day, canoe included. One guide to two men is amply sufficient, if you go light; otherwise, one to each man.

From Morris' down the West Branch, several pleasant trips may be taken. From Chesuncook, a pleasant and very exciting trip may be made to Old Town, Maine, via river all the way (save carries). A book, "Summer Vacations at Moosehead Lake and Vicinity," by Lucius Hubbard, will give you valuable information, has a fine map, and is richly illustrated with heliotype plates; published by A. Williams & Co., Boston, price \$1.50. Another excellent book, with same map, "Guide to Moosehead Lake and Northern Maine," published by Bradford & Anthony, Boston, will afford you much useful information; price, 75 cents, I think. I would recommend all sportsmen going in that direction to purchase both. The Forest and Stream Publishing Company will send them to you upon receipt of price.

GEO. A. FAY.

West Meriden, Conn., Aug. 14th.

PAWTUCKET, R. I., Aug., 20th.

Seeing no allusion to the incident in your issue of 19th inst., allow me to call attention to errors in your answers. Answers should be, viz.: Trout good all through that country. The lakes you mention are very easy of access. All of the larger lakes can be reached with only one carry, viz.: Mud Pond Carry; that is leaving out Northeast Carry at head of Moosehead, where canoes and baggage are carried across in wagons. Dozens make the trip every year—over thirty to my knowledge made it last year in August and September. Plenty of guides and all kinds of supplies can be obtained at the Kineo House, Moosehead Lake. Excuse my corrections of your answers—should have written last week I had been at home. I have been through the country inquired about, several times; once with my wife and two children—a boy of nine, and girl of seven—on my way down the St. John's. I was there last year on my way from St. John to the Arrostook waters, and am going some route this year, taking with me the one of your occasional correspondents and a brother-in-law, E. S. Steele. I cannot imagine who the party of three you mention could be. I intended camping on Eagle Lake last year, but the camp fires were so thick I left for the Arrostook, and believe mine to be the first canoe that ever went from Churchill and through Spider Lake into Arrostook waters. I was so delighted with the trip, and have talked so much of it to Steele, that he has signified a desire to go with me this year. We start about Sept. 15th, and I presume on his return he will give you an account of it. I should have done so last year, but I been that kind of a man.

LYMAN B. GORF.

CAMP CREAM O'TARTAR.

NO MAN'S LAND, August, 1880.

DEAR FOREST:—Every party which has gone into the woods this season, save ours, heralded its departure by many promises of prowess in hunting and fishing, and many promises of fish; and a squad which went down east by water actually and deliberately took a historian along to chronicle its adventures. We slipped off quietly—so quietly that I'll wager a hamper of trout against a basket of wine that no one knows who we are. So, to save curious readers' brains from the dog days, I will unravel our personal identities, and carry a trio—the Doctor, the Major, and me—"Scrubbe." So now you know us. Much good it may do you! Much good the camping out has done us! We have caught everything catchable in this region except a cold, and we daily "wax fat" and "kick" up our heels in very wantonness of enjoyment in living. The Doctor has a small insect net, with which he is occasionally, or rather frequently, seen running frantically along in pursuit of a strange insect. Some country gentlemen who saw him so engaged, went away very much impressed with the idea that he had the delirium tremens slightly. Yesterday he was chasing what he solemnly avers was a double-headed bug—a head at each end—and his foot catching a root he took a header into the lake. Being a good swimmer he came ashore as soon as he came to the surface. The Major can't swim a stroke. The other morning he had our day's supply of cigars in his hat, and when stepping from one boat to the other he stepped deliberately between them into the lake. Down he went, and coming up again among a raft of "weeds," he spluttered, "Save the cigars," and sank once more. We saved every cigar, and the man, and dried them.

The Major wishes every day, many times a day, for his sword. Not that he has any fears for his personal safety, but it would be so handy to spear frogs with.

The Doctor has just made an important scientific discovery. He has found out that grasshoppers in this section are subject to the lip complaint in whortleberry time. He is now writing an article, in very small type, on the cover of a cracker-box, to the London *Lancet*, announcing this fact. He expects to pay all his camping-out expenses by the remuneration he will receive for the communication, but it's my opinion that he will be out of pocket the express charges on the cracker-box cover.

If you, dear FOREST, expect to receive with this sacred any fish you are mistaken—very much so. What can't eat we sell, and don't send a scold to our bosom friends. We have a ready market, and the more we dispose of the less our camping-out costs us, which is an outrageously selfish, but an entirely common sense, view to take of it. The Doctor does not derive \$13,000 per annum from his practice; the Major was re-fitted by his grateful country a pension for knocking off his left great toe while fighting, or fleeing, or something in the Wilderness, so he isn't rolling in wealth, and as for me, who ever heard of an "ink-slinger" with any illthly lure? But, oh, FOREST, if you will come and see us, we can stay (say too long) you shall eat of the choicest drink of the choicest, and read the Doctor's cracker-box cover essay. Will you come?

THE SCRIBE.

Natural History.

—Address all communications to "Forest and Stream Publishing Company, New York."

PACKARD'S ZOOLOGY.

DR. PACKARD'S work is one of real value both to the student and the teacher of zoology. Within the past few years several so-called Manuals of Zoology have appeared, but, though some of them were not without a certain value, there was no one of them all which was not open to severe criticism. It is pleasant, therefore, to be able to speak of the present work as one of the very best of its kind that has yet come under our notice. It is not, of course, wholly free from mistakes; but such a book never can be perfect, and the few errors which are noticeable are, for the most part, of minor importance, and will no doubt be corrected in the subsequent editions, which will unquestionably be called for.

The work is admirably adapted for use as a text-book, and perhaps even more so for use in the laboratory, and—a fact which will especially recommend it to the beginner—is little burdened with those technical terms, which proved for so long a time a stumbling-block to one who attempts, without previous training or the assistance of more advanced workers, to gain a general knowledge of the structure of the principal types of animal life.

The treatment of the subject in hand is very good, the definitions and descriptions of structures clear though brief, and the language employed is such as can be comprehended by the general reader. This indeed constitutes, to our mind, one of the principal excellences of the book, for it is certainly an unusual state of things to find a work—especially one which treats of invertebrates—in which half a dozen consecutive lines will convey any intelligent impression to the mind of the non-scientific reader.

We are unable to give, at any length, the plan of the present work. The author commences with the simplest and most elementary forms, and proceeds from these through the higher groups, ending with the vertebrates, a method which seems to us much better than working down the scale from the higher groups to the lower.

The first eight chapters are devoted to defining the great groups of the animal kingdom; Chapter IX to the Comparative Anatomy of Organs; Chapter X to Development. The five succeeding chapters, which conclude the work, treat, somewhat briefly, the Geographical Distribution of Animals, the Geological Succession of Animals, the Origin of Species, Protective Resemblance, and Instinct and Reason in Animals. These, containing as they do summaries of many of the latest views on these most interesting topics, demand perusal by all who are fond of the study of nature. The volume is made still more useful to the student, or the reader who may desire further information with regard to any special group than can be given within the limits of a general work like the one under discussion, by a bibliography, in which the principal works necessary to the student of zoology are enumerated. There is also a glossary defining the more important technical terms employed.

The volume is well printed and very fully illustrated by wood-cuts, some of them original, but mostly taken from other works on zoology.

Taken as a whole the work is one which we can very cordially recommend, either to the student or the general reader, and it is indeed indispensable to any one who is interested in any form of animal life.

To the courtesy of the publishers, Messrs. Henry Holt & Co., we owe the opportunity of reproducing the accompanying wood-cuts of two American forms figured in the Zoology. They will be interesting to our readers, not only in themselves, but also for comparison with certain extraordinary illustrations which recently appeared in the columns of a contemporary purporting to be reproductions of the figures of the Rocky Mountain sheep and the musk ox given in Dr. Packard's work.

THE CAPTIVE WOODCOCK.

MR. MORRIS' tame woodcock, Dick, continues to excite great interest among sportsmen, and his owner's cosy little flower and bird store is daily visited by numbers of the fraternity, who take great delight in watching the bird. His new quarters are much more commodious than the old, and his owner has removed him to the greenhouse, where the noise of the street and the persistent attentions of the small boy, who always takes such delight in poking up the animals, no longer disturb him. The increased room and the quiet seem to have a beneficial effect upon Dick, and it appears that he is gaining in weight and generally improving in health.

more than his own weight of worms. This statement will excite the wonder of every one, but when we consider the total number of worms devoured by a bird in a year, or by a number of birds in any given time, we are at a loss whether to be more astounded at the voracity of the bird or the multitude of the worms which must exist to feed them.

Mr. Morris' letter is as follows:—

JEFFERSON MARKET, New York, Aug. 18th.

In answer to your favor of the 10th inst., I beg to hand you the following particulars about my woodcock, Dick, who is doing well.

From noon Aug. 12th to noon Aug. 13th the bird ate five and a quarter ounces (Troy), or 200 worms. He

wanted more at noon Aug. 13th. He weighs five ounces (Troy). The worms were given to him a couple of dozen at a time. I have fitted up a place for him with two breeding cages for canaries. In one is moss and a dish with clayey mud, in which I put the worms. I scatter worms in the moss, and he amuses himself, while not gorging himself with the worms in the mud, by hunting for worms in the moss. He does this for pastime, as he frequently fishes out a worm and allows it to crawl back into the moss without attempting to eat it. In the other cage are moss and a bed of bright, sharp, coarse sand, with a pan of water sunk in the moss. He appears to like to trot about in the sand, and bores into it, but when his bill becomes covered with sand he goes to the water and washes it. I have not seen him drink. His digestion appears to be perfect. I shall get some peaty mud to put his worms in, as I have an idea that the mud he bores in now contains sandy earth, which injures his bill, as this organ appears dull, as if worn by silica in the earth, and not polished, as seen in woodcock in a state of nature. Many sportsmen visit my store to see Dick. I am, very truly yours,

JOHN MORRIS.

At our request Mr. Morris has repeated his experiment with Dick, and the result shows that the recent changes of quarter has had a very beneficial effect. Mr. Morris says,

OVIPOS MOSCHATUS—Blainville.

It is very interesting to watch the bird feed, and to see him, after he has satisfied his hunger, plunge his bill several times into the sand, and then, walking to the water-dish, wash it by gently shaking his head. Dick is somewhat fastidious about his food, for some time ago Mr. Morris, having received a lot of the bright red worms found in stable yards, offered them to the bird, and though at first he seized them he declined to eat a single one. His master thinks that the worms tasted of the ammonia of the stable yard, and this idea is confirmed

writing under date of Aug. 23d:—

I made the experiment, as you requested, and found that the woodcock consumed eight ounces of worms in twenty-four hours, and could have eaten more had I given them to him. The bird now weighs six ounces, having increased in weight one ounce since I obtained possession of him.

JOHN MORRIS.

FOOD OF SNAKES.—Frederick City, Md., Aug. 7th.—Editor Forest and Stream:—I noticed in FOREST AND STREAM that Mr. C. R. Shaw killed at Sayville, L. I., a black snake, and on shaking the reptile by the tail a striped snake nineteen inches long came from its mouth, and it was still alive. I write to state that this is of no uncommon occurrence. I have killed plenty of black snakes with striped, or what we call in Maryland garter snakes, in their stomachs, and I have afterwards held up black snakes, just after being killed, and have seen striped snakes come out of their mouth and fall on the ground and run as well as ever. On one occasion in the Singaree Hills, I killed a large black snake six feet long, up a tree. He had in his stomach one pine, or red squirrel, one striped snake three feet long, and nineteen eggs the size of pigeon's eggs. When I was in the act of skinning the black snake, the striped snake came out of his mouth and seemed to be as lively as ever.

FRANK SCHLEY.

NOTES ON SNAKES.—Burke County, Ga.—Editor Forest and Stream:—Being aware of the fact that all accounts of the wonderful pertaining to snakes, regardless of the integrity of the writer, are taken *cum grano salis*, I will simply state what I saw yesterday. In walking on the road I discovered what looked like two snakes in very close proximity. Upon a closer examination I found a king snake swallowing a rattlesnake—the former three and a half feet in length, about, but apparently considerably smaller than the latter, which was the possessor of five rattles and a button. I knew that the "king," called "chicken snake," would eat chickens, frogs, etc., but never supposed they would attempt an undertaking so apparently impossible. It was slow work, and I looked on in vain so thoroughly disgusted that I shot them both, leaving them for the dirtiest scavenger—the buzzard not excepted—the hog, which in a short time devoured both with a relish no doubt. Whether this is anything uncommon I know not, but it astonished me, and will, no doubt, be a surprise to some of your readers.

D. P. D.

We regret extremely that our correspondent did not see the play out, and further, that he did not give us more particular details of the manner in which the king went to work to devour his prey. Will he not give us such particulars now?



OVIPOS MOSCHATUS—Blainville.



OVIS MONTANA—Cuv.

by the fact that these same worms, after having been kept for a few days in fresh earth, were devoured with as much apparent relish as the common worms.

The voracity of the woodcock is proverbial, but opportunities for exact observations on this point rarely occur, and it seemed important in this case to take advantage of Dick's captivity to arrive at some definite results as to the amount of food devoured by him in one day. We therefore requested Mr. Morris to make certain observations; and in his very clear letter, given below, there is food for much reflection. It appears from these experiments that the woodcock, even in captivity and deprived of the exercise which a wild bird takes, devours daily

Editor Forest and Stream:—I notice that the snake is coming to the front, and perhaps the following true tale may be appropriate to the *snail* column: A few years since I was engaged in clearing a scrub-oak lot, and one day while I was resting I heard in the brush just in front of me a snuffling of twigs; on looking to discover the cause, I found a black snake, some three feet in length, in the act of swallowing a striped snake; they were both twisted around the twigs, the striped one holding on for dear life; but the black was too much for him, and had engorged more than one-half of his victim when I first found them. I watched them till I saw the tip of the striped snake's tail disappear down the black's mouth, when, with a quick stroke of my bush-scythe, I cut the reptile in two, and, to my surprise, out ran the striped snake, apparently unharmed, and made his escape.

WEBB.

Penbina, D. T., Aug. 11th.—*Editor Forest and Stream:*—In a recent issue of *FOREST AND STREAM*, a correspondent gives some items upon the capacity of the uphidian gullet, to which I will add my experience. When a boy of twelve, I once killed a largestriped snake. He bulged out so strangely, that I cut him open and found a huge toad, nearly as broad as my hand, and still able to kick feebly. Whether or not the snake believed in jewels in the toad's head, he evidently considered the specs valuable for dietetic purposes, and from the shape of the reptile of sedentary habits, it might with propriety be called a "square meal." M. A. BROWN.

Pleasant Plains, Aug. 13th.—*Editor Forest and Stream:*—Noticing your article in paper of Aug. 5th, on the cannibalistic snake, I would say I killed one Tuesday, Aug. 10th, under similar circumstances. While out after woodcock I came upon a black snake over four feet long in the act of swallowing a large garter snake. He had him half way down, and evidently intended making a clean job of it. He lay motionless until I struck him with a stone, and then ejected the garter snake, which was nearly used up, the neck just back of the head being lacerated. The black snake then raised his head toward me in a threatening manner, making no effort to escape. I could detect no hissing. It would seem from this that a snake will eat snake, and that the victim is seized by the head.

CATT. CLAYTON.

An exchange contains the following item with regard to an enormous rattlesnake recently received at the Smithsonian Institution, which is interesting. It is as follows:—

The largest rattlesnake probably, that has ever been seen in Washington, arrived at the Smithsonian Institution on Saturday from Florida, forwarded by Mr. James Bell, who is in that State on special duty from the Interior Department. The snake belongs to the *Crotalus adamanteus*, or diamond rattle family. It is about eight feet long, will measure twelve inches around the body and has twelve rattles and a button on the end of its tail. It came in a close-woven canvas bag, and was at once dropped into a large square wooden box, with wire work sides and a sliding cover, prepared for the reception of venomous reptiles. Not having been fed for some time it is particularly ferocious, and its rattle is constant on the snake whenever any one approaches or there is any noise in the room where it is kept. This monster snake is to be killed in a day or two, for the purpose of taking a plaster cast of it. The manner of killing for this purpose is by putting the serpent in a close vessel and admitting a sponge saturated with chloroform. This preserves the form so that a life-like cast may be taken.

ALBINOES, NO DOUBT.—A correspondent from Wawayanda writes to us about some cream colored rats with pink eyes which are multiplying about his buildings, and asks if they are albinos. He describes them as abundant and more bold than common rats, and states that they do much damage, gnawing everything within reach. We think there is no doubt that they are albinos, for white rats and mice usually, or often, produce albinos.

FOOD OF SQUIRRELS.—*Wawayanda, Aug. 14th.*—*Editor Forest and Stream:*—Living in a locality where squirrels are quite numerous, I have noticed they do not subsist entirely on nuts and acorns, as a great many people suppose they do. A number of the little ground squirrels have taken up their abode in the ice house only a few steps away from the dwelling house, and almost any time these little fellows can be seen scampering around the yard. A short time since, in company with some friends, we were watching one of them playing around, when all of a sudden he jumped in the air and caught a large black beetle, and then quietly sat down on his haunches and pulled off the bug's head and eat it, and then finished the body with an evident relish. Again I noticed the same little animal picking blackberries off a bush and eating them, seemingly enjoying them very much. My brother, driving along the road one day, saw a red squirrel descending a tree from a robin's nest with a whole worm in its mouth, and scamper off in the woods with it.

WALKILL.

Red squirrels are great robbers of birds' nests.

Penbina, D. T., Aug. 11th.—*Editor Forest and Stream:*—In your last number I see a communication which I recognize as coming from an old friend, in regard to the economical habits of the gray squirrel, and would like to add my confirmation. In the fall of 1876, while strolling through an orchard in Ohio, I saw a squirrel run into a pile of rails with a large nut in his mouth. Prompted by curiosity I overturned the pile and found no less than three pecks of butternuts snugly piled in a cavity. The store was tempting, but admiration for the industry of the little "varmint" prevailed over cupidity, and I replaced the rails and left it undisturbed.

M. A. BROWN.

MOCKING BIRD IN CANADA.—The *Strathroy* (Canada) Age, of July 1st, notices the appearance on the grounds of Mr. L. H. Smith, of that town, of a mocking bird. This species is not often found so far northward, and its occurrence in Canada is noteworthy.

Fish Culture.

—Address all communications to "Forest and Stream Publishing Company, New York."

NEW YORK FISH COMMISSION.

To the Public:—

The Governor of this State declined to give his sanction to the usual appropriation for the maintenance of artificial fish culture, the means whereby the public waters of the State have been stocked with the choicest game and food fish to an extent that has created plenty where before there was scarcity. This unlooked for action, the reason for which has not been communicated to the Commissioners of Fisheries, leaves a valuable public property in waters, buildings, hatching appliances and stock of fish without the means of available use or even of preservation. The stock fish, many thousand in number, requiring daily care and feeding and capable of producing annually 5,000,000 of fry, are the fruit of many years' careful selection and breeding, and it lost now cannot be replaced without years of labor and many thousands of dollars expenditure. The State hatchery of Caledonia, acquired at a cost of \$15,000, is, in respect to its supply in quantity and quality of water, its equipment in the most approved appliances for breeding, its skilled and experienced operators, its supply of stock fish, and in the success which has attended all its operations, the most complete and valuable of its kind on the west side of the Atlantic Ocean. What has been done by the commission toward replenishing exhausted waters with the finest game and food fish is too well known to the public. The multiplication of shad in the Hudson River to the extent of many million each year, so that the cost to consumers has been largely reduced within the last ten years, alone justifies all the appropriations that have been made by the State for the promotion of artificial fish culture.

The commissioners cannot consistently with the duty committed to them by the Legislature permit this valuable property and the important interest involved in its use to go to decay and destruction by reason of the refusal of the Executive to sanction the appropriations necessary for its support. They therefore announce to the public that the operations of the State hatchery will, if need be, and as far as shall be necessary to save the State from loss, be continued under the personal responsibility of the members of the commission, after the close of the fiscal year and until the Legislature shall have an opportunity to review the action of the Governor, in the hope making power will sustain them by making the necessary appropriations at the earliest possible stage of the session; or, failing to do this, will provide by law for such a disposition of the property as will save the sacrifice which may result from a failure to provide the requisite current support.

ROBERT B. ROOSEVELT, President,
RICHARD U. SHERMAN,
EUGENE G. BLACKFORD,
Commissioners of Fisheries.

August 15th.

These are good words and bravely spoken. The commissioners stand in the gap and will not allow the results of the work which has been done in past years to go to waste. Many men would throw up the whole affair in disgust at the false economy which saves at the spigot and wastes at the bung, but the New York Commission is made of better stuff. They know that the people of the State are with them, and are aware that their work is for the general good, but it is well for the people at large to know that these men who give their time to this matter and occasionally receive abuse from short-sighted people, serve without the slightest pecuniary recompense, seeking their reward solely in the consciousness of having done good deeds, and in the knowledge that their work is appreciated by all who have paid the slightest attention to political economy. It is needless at this late day to enter into any explanation of the character of their work or its benefits.

The local press throughout the State is commenting on the loss that is entailed by the Governor's veto, and the great New York dailies also come out strong upon it. After speaking of the good work of the commission the *Herald* says:—

Unfortunately the State Executive, amid his manifold duties, has not had his attention directed to these facts, and in a spirit of economy, which would be highly laudable were it more intelligent, he has refused to sanction the annual appropriation for artificial fish culture. The natural effect of this veto would be the immediate ruin of a valuable and flourishing establishment which could not be replaced for years. From such a misfortune, however, the State will be temporarily saved by the public spirited and patriotic conduct of the commissioners.

Messrs. Roosevelt, Sherman and Blackford, in continuing the operations of the State hatchery, upon their personal responsibility until the next Legislature can review the action of the Governor. There cannot, of course, be any doubt of the action of that body.

In this connection it may be proper to say that a private citizen has offered to give five hundred dollars for the use of the commission, if needed, and it is to be hoped that his example will be followed. Surely the money will be well invested for the future benefit of the people.

A GOOD CROP OF SALMON EGGS PROMISED.—*United States Fishery, Baird, Shasta County, Cal. Aug. 12th.*—We went into camp this year the last week in June, since which time we have all been quite busy with the usual work of making preparations for taking the salmon eggs. Our intentions are to take six million of eggs this year, a considerably smaller amount than was produced last season. The eggs are to be taken from the tributaries in the East, and two million are for the State of California, leaving a margin of a million. Of those for this State, one million will be hatched here at the fishery, and the young salmon will be placed in the McCloud

River. The other million will be carried to Pit River, hatched there, and the young fish deposited in that river. Hitherto, high falls have prevented the salmon from ascending to the head waters of this stream for the purpose of spawning, but the last State Legislature appropriated three thousand dollars to remove this obstruction, and this will open three hundred miles of spawning ground which was previously useless. At present everything is in readiness for the spawning season. The bridge of racks is in place to prevent the salmon going up the river, the hatching houses, etc., are in order. This has been accomplished in a very thorough manner under the genial and efficient supervision of Mr. Livingston Stone, with the assistance of his practical and reliable foreman, Mr. J. A. Richardson.

There is an unusually large run of salmon this year, and it would be a very easy matter to take several million of eggs were it required. Several parties from San Francisco and other parts of the State have recruited themselves in this vicinity with the pure waters and air of the McCloud and the sport of hunting and fishing. They evidently enjoyed themselves, as they were reluctant to leave, and promised a like "outing" next year. The month of September will be a busy one for us, a large force of white men and Indians will be employed, and we have every reason to expect a prosperous season.

GEO. B. WILLIAMS, JR.

SHAD HATCHING AND SHAD LAWS.

Editor Forest and Stream:—

I notice, in your issue of Aug. 5th, in the article upon the work of the Connecticut Fish Commission, an account of their failure in the attempt to hatch shad at the mouth of the Connecticut River. It would seem that the attempt was made by the desire of the committee on fisheries of the last Legislature, and against the better judgment of Dr. Hudson, one of the commissioners. It seems to me that a committee of men of sufficient judgment to be intrusted with the duties of legislators would not, in the management of their private business, attempt such an undertaking without informing themselves as to its feasibility. They would naturally seek the advice of fish culturists. Any intelligent fisherman would be sure to say that the anadromous fishes would not probably ripen their spawn and wait to an extent that would insure fertilization, while remaining in salt water. The intelligent and natural conclusion would be that the fish would not be in a condition for fertilization before reaching their natural spawning ground. Repeated experiments by intelligent and experienced fish culturists show that a large percentage of the fishes are unripe upon their arrival at their natural spawning grounds. The student of nature would argue that the shad would not wait until they reached their spawning grounds in time to select and prepare their beds before the arrival of the time for performing the final functions of nature.

The foregoing expresses my individual opinion as entertained for several years past. A few years ago, so intelligent a trio as the New Jersey State Fish Commission were supposed to be, made the attempt to hatch shad in the Delaware River at Pennsboro, N. J., a considerable distance from the mouth of the river, but more than a hundred miles below their natural spawning grounds. I at once predicted a total failure of the undertaking. I quickly expressing my opinion upon this and some other absurdities of the commission, I incurred their active hostility, but my predictions proved true nevertheless. Not a shad was hatched, but the State had to pay for the foolish experiment. My opinion upon this subject was quite substantially fortified while making some investigations at South Hadley Falls a few weeks ago. It is well known that one of the earliest successful attempts to hatch shad artificially was at that point. That unique and best advertised fish culturist, Mr. Seth Green, was employed, I believe, by both national and State authority to make the experiment. After exhausting his fund of experience and other knowledge in connection with the experiment, Mr. Green made a failure in the attempt, and packed his boxes, intending to return home next day. In the meantime an old shad fisherman, well known at the falls, besought Mr. Green to let him make a trial. The boxes were unpacked and the fisherman placed them in a tributary of the river, composed of spring water, and the experiment was an immediate success. I believe Mr. Green received the credit. The locally accepted reasons for Mr. Green's failure and the fisherman's success were, that Mr. Green's experiment was made in the warm water of the river, which was very low at the time, while the fisherman's experiment was made in the cooler water of the tributary. With these reasons the matter rested. I have taken the liberty of pursuing the subject a little farther, and trust your readers will pardon any seeming egotism in my statement of conclusions: First, it is well known at the falls that no shad ever pass over the expensive fishway erected at Holyoke Dam. The result is that the shad are stopped long before reaching their natural spawning grounds, and are, consequently, not in a condition for certain fertilization upon their arrival at the falls. This fact would have operated against Mr. Green's attempt. The fisherman, making his attempt later, after the shad have found his spawners in a ripper condition, yet it is not probable that his attempt would have been a success had he tried it in the warm river water. His success must be attributed to the approximately natural conditions attendant upon the experiment, namely, the ripe condition of the spawners and the cooler condition of the water used, both assimilating the natural condition of things as they would have existed had the shad been permitted to ascend to the headwaters and tributaries of the river, their natural spawning grounds.

A deduction which may be drawn from these premises is, that the close-time laws regulating the seining of shad are erroneous. The prevailing laws fix a given time as a close time, which is uniform for the entire river, as, for instance, from midnight on Saturday till midnight the following Sunday. Now, it has been long known that shad occupy several days in reaching from the mouth to the headwaters of such a river as the Connecticut, the Hudson, the Delaware, etc. It must be obvious, then, that the present close-time laws permit the shad to pass the lower series only to be taken in those a few miles above. If this inference is correct, then it follows that close time should be arranged progressively. A series of

intelligent observations could be made at the commencement of the shad season, upon which could be based with practicable accuracy a scale of close time for different points on any given river. My own opinion is that no shad should be taken with seines until they make their appearance upon their spawning grounds; then let the work commence at the same time upon the whole length of the stream. Under the prevailing laws, the fisheries at or near the mouth of the rivers have several days advantage over the upper fisheries, which is certainly unjust.

If legislators and other officials would, in their official capacity, exercise the same degree of judgment that they do in the management of their private business, our laws would be more just and official duties more intelligently performed.

MILTON P. PIERCE.

Aquidule Ponds, Wrentham, N. J.
I desire to congratulate the FOREST AND STREAM upon the accession of Mr. Fred Mather as editor of the Fish Department of the journal.

M. P. P.

FRIGATE MACKEREL AGAIN HEARD FROM.

NEWPORT, R. I., Aug. 12th.

Editor Forest and Stream:—

The past week has brought many new observations regarding the abundance of the frigate mackerel (*Axiis rufus*) recently referred to in FOREST AND STREAM as having for the first time appeared on our coast. These fish seem to have come in immense schools into the waters between Montauk Point and Georges Bank, and from Mr. Clarke's statements it appears that they have been observed in small numbers by fishermen in previous years. Several vessels have come into Newport recently, reporting their presence in immense numbers in the vicinity of Block Island. It will interest the "ichthyophagists" to know that several persons in Newport have tested the fish, and pronounce it inferior to the bonito. Part of the flesh, that on the posterior part of the body, is white, but behind the gills is black and rank, while the meat near the backbone is said to be of disagreeable, sour flavor.

It is hard to predict what its influence will be upon other fishes already occupying our waters. Its mouth is small and its teeth feeble, so that it is hardly likely to become a ravenous, like the bonito and the bluefish. There is little probability, on the other hand, that its advent will be of any special importance from an economical point of view, as it is not likely to be so common as the haddock, and it would hardly pay at present to capture it solely for the purpose of using its flesh in the manufacture of fertilizers.

Mr. A. Howard Clarke, in charge of the fish commission station at Gloucester, has communicated to Prof. Baird some interesting facts regarding its abundance. From these statements it would also appear that the species has been observed occasionally in past years. He writes under date of Aug. 10th: "I have received this morning, from the schooner Fitz J. Babson, just arrived from Block Island, a fish answering to your description of the *Axiis*, having a corset of scales around the pectoral fin as in the tunny. The captain of the vessel, Joshua Riggs, reports that about a week ago he had a hundred barrels in the seine at one time, and saw over twenty schools of them. He saw them as far East as Sheep-Pig Light Shoal. They are very easy to catch, but, like mackerels, do not rush, and are not frightened at the seine. They go in immense numbers, he thinks, as many as one thousand barrels to a school. The day after the appearance of these fish the mackerel disappeared, but he does not know whether the mackerel were driven away by them or not. They feed on mackerel food. Mr. Daniel Hiltz, of the same vessel, says that he caught one of just the same kind in Feb. 1879, on a hook and reel, on the eastern part of the middle bank in forty fathoms of water. He took it to Boston, where it was called a young bonito."

Mr. John Henderson, of the schooner Sarah C. Wharf, says that two vessels caught such fish recently eastward of here. The schooner American Eagle, of Provincetown, took a number of barrels of them into Newport, and sold them for a dollar a barrel. Another Cape Cod vessel—he does not know the name—took about fifty barrels of them and took them away. All the mackerel seiners from Block Island report seeing quantities of this new fish within the past fortnight. The captain of the schooner Sarah C. Wharf says he first saw them a fortnight ago some fifteen miles off Block Island. The captain and several of the crew of the Ella M. Johnson, of Newburyport, just arrived from Block Island, state they saw abundance of the *Axiis*, but did not know where they were until they were brought from you at Newport. They were until recently in its stomach the ordinary red mackerel food. This crew differ with the crew of the schooner Fitz J. Babson with regard to the ease of capturing them—think them rather difficult to take; say they flip like porgies, and do not rush like mackerel; they saw ten large schools of them on Saturday last when some fifteen miles south of Block Island.

I hope that any reader of FOREST AND STREAM who has seen this fish will mention it. Some may, perhaps, have an opportunity of studying its habits. The length of those I have seen ranges from twelve to sixteen inches, and their weight from three-quarters of a pound to a pound and a half or more. Those sent to New York market were part of the lot taken by the schooner American Eagle and brought into Newport, whence they were shipped by Mr. Thompson, a fish dealer of this place. They would require from eighty to one hundred of them to fill a barrel, so the estimate of Captain Riggs that there are a thousand barrels in one of the schools, shows how exceedingly abundant they must be. The name "frigate mackerel," used in Bermuda, would seem to be the best name for use in this country, since the fish resembles the mackerel more than they do the bonito or tunny.

G. BROWN GORDON.

CARP IN TENNESSEE.—Nashville, Tenn., Aug. 6th.—Messrs Newman and Gardner returned from a month's fishing in the upper Stone River. They report having had excellent sport, taking a great many bass and black perch. On a trot line they captured a monster catfish; he weighed forty-six pounds. It is specially noticeable that in all the streams in this State greater quantities, more varieties and finer fish have been taken of late than for many past. Col. Akers, our fish commissioner, received last year from Prof. Baird a quantity of German

carp. Mr. Frank Green obtained forty of these little strangers, to place in a pond on his farm near the city. He reports them having grown to five or six inches in length, and says that he has noticed an enormous number of small minnows in the pond lately. Can they be the product of the carps so recently placed there? At what age do they begin to spawn? Mr. Green says that there were a few mud-cat in the pond when the carps were put in. Although they have not interfered with the carp. Could it be that the minnows, referred to, were of that species. It would be a matter of interest to have an answer from the FOREST AND STREAM to these questions.

J. D. II.

There have been many reports of the spawning of carp which were distributed last year, and it is possible that yours may have done so. It is also possible that the young fish referred to are carp. It does not seem possible that they could be confounded with "mud eels." Send specimens to Prof. S. F. Baird, Washington, D. C., and then you will get positive information.

GROWTH OF BLACK BASS IN CALIFORNIA.—The following letter seems to indicate that the black bass grow rapidly in their new home in the West:—

SAN FRANCISCO, Aug. 4th.

Mr. Seth Green:—

Your letter making inquiry concerning the black bass which we received from you in the spring of 1878, is before me.

They were placed in a small lake, containing about 100 acres, back of Oakland, and last week we went there for the first time with our rods to see if we could catch any of them, as we were uncertain as to what had become of them, and were anxious to learn the result of our experiment. To our surprise and delight no sooner had the cast been made, than one was hooked, and whenever we threw in anywhere around the lake we met with a similar response. About twenty were caught in short time, measuring from eight to ten inches in length, no doubt of last year's spawning. Upon examination we saw a great many small ones, from three to four inches in length, in schools of several hundred. These schools of small black bass were to be seen all around the lake, and we are satisfied that the water of the lake is adapted to them. The lake will be well stocked in a year or two, and we will then have rare sport; until then no fishing will be allowed.

W. W. TRAYLOR.

Sea and River Fishing.

FISH IN SEASON IN AUGUST.

FRESH WATER.

Trout, <i>Salmo fontinalis</i> .	Muskellunge, <i>Esox nubilus</i> .
Salmon, <i>Salmo salar</i> .	Brook Pickerel, <i>Esox lucius</i> .
Lake Trout, <i>Salmo namaycush</i> .	Yellow Perch, <i>Perca flavescens</i> .
Land-locked Salmon, <i>Salmo salar</i> .	Grayling, <i>Thymallus tricolor</i> .
	Black Bass, <i>Micropterus salmoides</i> ; <i>M. polidus</i> .
	SALT WATER.
Sea Bass, <i>Centropristis striata</i> .	Bluefish, <i>Pomatomus saltatrix</i> .
Sheepshead, <i>Archosargus probatopterus</i> .	Spanish Mackerel, <i>Cybinus maculatus</i> .
Lake Trout, <i>Salmo namaycush</i> .	Caro, <i>Cybinus regalis</i> .
Striped Bass, <i>Morone chirocentrus</i> .	Bonito, <i>Sarda pilchardus</i> .
White Perch, <i>Morone americana</i> .	Kingfish, <i>Menticoccus nebulosus</i> .
Weakfish, <i>Cynoscion regalis</i> .	

—We regret to say that through an error of our printer the electrolyte of Messrs. Abbey & Imbrie was substituted in Messrs. Conroy, Bissett and Malleson's advertisement, last week, for their own, thereby giving a wrong impression of the reel advertised. If those interested will refer to the advertisement this week they will find a correct representation of this famous black bass reel, which is an improvement on the Frankfort reel, and manufactured *only* by Messrs. Conroy, Bissett & Malleson, and *not* by Messrs. Abbey and Imbrie, as might be inferred by last week's advertisement.

SALMO WILMOTI AGAIN.—Grand Falls, N. B., Aug. 10th.—Editor Forest and Stream:—I must certainly take exception to some remarks over the signature of "Wm. Couper," which appeared in FOREST AND STREAM of 5th inst., and also to the editorial comments at foot. The Ontario salmon, exhibited last fall at Ottawa, are without doubt a distinct variety, and not the true *Salmo salar*, the ova and fry being of a lighter and more delicate color than those of the *salar*, as every one who has been engaged in the artificial reproduction of fish of these classes is aware. The distinctive title conferred on the Ontario salmon, and which is with such singular bad taste objected to by your correspondent, originated with the Acclimatization Society of France, at the time of their presentation to Mr. Wilmot of a gold medal in recognition of his services in interests of fish husbandry. It has never yet been determined if these fish migrate to the sea, many reflecting persons being of opinion that they frequent salt springs within Lake Ontario. This point, however, it is hoped will be shortly cleared up, as it is expected that facilities for close observation of the habits of these fish will be afforded by the government.

Our remarks, which were appended to the letter of our correspondent, Mr. Couper, to which our other correspondent, B., objects, were simply these: "There is no fish known to naturalists by this name, neither has there been any description of a new salmon from that region published lately. The salmon found on Lake Ontario and its tributaries are *Salmo salar*." These we repeat, with the addition that our correspondent evidently thinks the color of eggs and fry sufficient to found a species upon! No names are accepted by zoologists without a description, and no such description has been made by any one competent to do it; or, if so, it has not been published in America. The land-locked salmon of Maine, the so-called *S. glozerii*, or *S. sebago*, is now declared by

our best authorities to be *S. salar*, as no structural differences can be observed. It is now in order for our correspondent to give us the name of the ichthyologist of the Société d'Acclimatation who christened this salmon, together with his reasons for creating a new species differing from the *salar*.

It then rests with the zoologists of America to accept or decline it, according as the reasons may seem valid or otherwise. At present it is safe to say that *S. wilmoti* is unknown to them, and until we receive the name from one of the prominent ichthyologists of America, we must decline to allow it to be a valid cognomen. We now hope that our correspondent, B., will see that we are upon solid ground, and that we are ready to accept the dictates of science, when we know that it is science which dictates.

✓ **THE ICHTHYOPHAGISTS.**—The New York Times remarks upon the recent dinner of this society that it may be useful in introducing to our tables some valuable fishes which foolish prejudice has hitherto neglected. The skates, for instance, which live principally upon crustaceans and mollusks, the very food which gives to the shad and pompano their delicate flavor, and make the whitefish of the great lakes so delicious. Most European nations have long ago recognized the excellence of the skate.

This writer, however, is mistaken in supposing that the razor-shell clam was first eaten in the United States at that dinner. This species of clam has long been used by the people of the east coast of Florida, who value it highly, and it is the subject of a long book on the coast, particularly a very small clam, about an inch long, with a parti-colored shell, found abundantly on the beaches. A quart of these are stewed, shells and all, then the shells being strained off, there remains a rich and savory soup.

The present writer has tasted many species of fish, from shark to sculpin, and the only one that he has found to be wholly unpalatable is the dogfish of the Western and Southern waters (*Amia calva*), sometimes called "lawyer." Nothing but starvation could induce a man to eat heartily of this soft, cottony, vile-flavored fish. Even the hogs reject it. It is only fit for the manure heap, except that from its belly can be cut a silvery strip which is very tough and suitable for pickered bait.

When the writer in the Times classes the muskellunge with the catfish and sucker, he induces the reader that he has never tasted *Esox nubilus*—certainly, next to the whitefish, the most excellent of the fishes of the Northwest. It is, however, rare, and the Great Northern pickerel is often sold for it. Of the three best fishes in the United States, two are peculiar to America—the whitefish of the great lakes (*Coregonus albus*), the pompano of the Florida coasts and the gulf (*Trachopterus carolinus*), and the sea-salmon of the Northwestern coast (*Salmo salar*). The whitefish is the richest and the richest and the most delicate; for the same reason it bears transportation the best. The pompano combines the excellence of the two former, and may perhaps be considered the best fish on this continent.

But to enjoy any of these in full perfection they must be eaten on the shores of their native waters—even the salmon, which best bears transportation, gives one, when cooked and eaten in camp, just from the stream, a new idea of what a salmon may and should be. S. C. C.

✓ **BLACK BASS IN IOWA.**—Manchester, Iowa, Aug. 7th.—The bass season opened June 1st, and a great number of them have been taken, but the catch has not been good or regular; but on some occasions the catches have been large. Four gentlemen with two boats on the Leavitt mill-dam, at the headwaters of the Maquoketa River, in this county, caught sixty black bass in three hours in the afternoon and a few hours in the morning. This string averaged about three pounds—one weighed six, and many of them three pounds. I would like to see some of the fancy bass fishers catch one with an eight ounce rod. They could not catch a two-pounder with such a rod. The instant they take the minnow they dart for the roots of an old stump, the only place the large ones are found, and in an instant they have wrapped your line three times around a root ten feet under water. The most expert fishers cannot let the cork go down more than a few inches until a quick jerk with a stiff pole stops him.

The six or eight mill-ponds of the Maquoketa in Delaine County are absolutely full of yearling and two-year-old bass. The enforcement of the closed season has caused this great success in breeding them. Shaw's fishway will soon be placed in the dams, and this will greatly aid us. We have two varieties of black bass—one the pure black bass. You will know him from his babyhood to old age. It is black, fine scaled and almost always has about one-tenth of the end of his tail light color and transparent. We can see the fry by the millions now, three inches long, and they will jump for a minnow. The other variety is greenish in color, with beautiful black or brown spots almost like a trout, only the spots are larger. Two persons fishing with the same bait will catch them alternately one black and one green. There is no certainty of how they became inhabitants of our waters. As yet there has been none caught as large as the black bass. Some say they were placed in the Wapsey Run from Otsego Lake, and came from the Mississippi River here.

We have some of the finest trout streams in the world, to which I have before called attention. We have millions of young fry.

There were taken so many quail in Iowa—the roads and fields are full of them. The prairie-chicken season opens on the 15th. They have not been so fine and plenty for years; but it is impossible to prevent some persons from

PENNSYLVANIA STATE FIELD TRIAL ASSOCIATION.—The first monthly meeting of the Pennsylvania Field Trial Association was held at Pittsburg, Pa., on Aug. 18th, when it was decided to run the trials at Lancaster, Pa., on the 19th, 20th and 21st, the days following. The purpose of the association is the encouragement of the raising and training of pointers and setters. The judges are Messrs. B. F. Wilson, of Pittsburg, Pa., Theodore Morford, of Newton, N. J., and Dr. W. Twaddell, of Philadelphia. Mr. B. W. Richards, of Philadelphia, resigned as a member of the Executive Committee and Mr. S. S. Brown, of Pittsburg, was elected to fill the vacancy. Mr. F. A. Dillenderfer, of Lancaster, was appointed a committee of one (with power to add) to the committee to select the grounds for running, and to make all necessary arrangements for the trials. The constitution, by-laws and field trial rules of the National American Kennel Club govern the association. Any one is eligible to run unless he shall have been owned in the State at least three months prior to date of commencement of trial on Nov. 9th. Puppies whelped on or after April 15th previous year are eligible for Puppy Stakes, and puppies whelped on or after Oct. 15th, for Nursery Stakes. The trial will include four stakes: *First*, Puppy—entry, \$5. *Second*, Puppy—entry, \$5. *Third*, Nursery—entry, \$5. *Fourth*, Puppy—entry, \$5. No forfeit in any of the above stakes. The fourth is only open to members of the association owning and handling their own dogs. The officers are: President, J. Palmer O'Neil, Pittsburg. First Vice-President, Mr. Samuel G. Dickson, Philadelphia. Second Vice-President, Mr. Edgar Huidekoper, Meadville. Treasurer, Mr. F. A. Dillenderfer, Lancaster. Secretary, Mr.

Dr. Ruth next began to show his ability as a snap shot. The sights of the rifle seemed to be of no special assistance to him for when they were covered by a card he used the weapon and balls placed on the stand and again at the glass spheres three

0. 14. Cavalry State Match: open to teams of 7 from any op. or other organization armed with carbines, of the National Guard, S. Y., each 1 member certified by their commander to be a usual member, in good standing, of the troop he represents, to have been such on June 1st, 1890; they shall appear in the form of their corps (full dress or fatigue); distance, 200 yards; lion, standing; models, 7; weapon, Remington, breech-loading carbine; match, 100; with either the military or antiquary arrangement. Entrance fee, \$1 each member. Entrance to free for 100.

team makes the highest aggregate score, a trophy, value \$70; second prize, to each member of the team making the second highest aggregate score, 100 rounds of ammunition, value \$24.50. No. 15, Short Range Team Match: open to teams of 4 from any regularly organized rifle club or association or military organization (troop, battery or company) in the United States; each competitor must be certified to as being a regular member in good standing, of the organization which he represents, and must have been such on June 1st, 1890; distances, 200 and 300 yards; rounds, 7 at each distance; weapon, any rifle or carbine within the rules; position, standing. Entrance fee, \$1 each man. More than one team may be entered from the same organization, but the same individual will not be allowed to appear in two teams. First prize, to the team making the highest aggregate score, cash, \$50; second prize, to the team making the second highest aggregate score, cash, \$25; third prize, to the team making the third highest aggregate score, cash, \$10.

No. 16, Military Team Match, 300 yards: open to teams of 5 men from any company, troop or battery of the National Guard of New York, or other States, or of the regular army, navy, or militia. Five come, to be composed of company officers, non-commissioned officers or privates certified to have been members of the company they represent on June 1st, 1890; position, standing; an embossed flag, value \$100, to be won three times before becoming the property of the organization; three prize, \$25; third prize, \$15.

Steward's Aggregate Prizes: offered annually by Mr. J. H. Steward, Ontario, N. Y., 405 Strand, London, W. C., England. The disposition of these prizes will be announced later.

A New Fire-arm.—Lieut. Andrew H. Russell, Ordnance Corps, United States army, who is at present stationed at the Watertown Arsenal, Mass., has taken out letters-patent, dated Aug. 3d, 1890, on an improved magazine fire-arm. His invention relates to the class of small arms designated as bolt guns. Some of the features of his system, he claims, can be employed beneficially with machine guns and with breech-loading cannon, by increasing the size and strength of the parts. The invention is very ingenious. Lieut. Russell claims 32 combinations of ideas embraced in this new fire-arm.

Archery.

—Address all communications to "Forest and Stream Publishing Company, New York."

HIGHLAND PARK, N. Y., Aug. 10th.—The following is a report of the first of three matches arranged between the Wabash Merry Bowmen and the Highland Park Archers. The conditions were, teams of six, 90 arrows at 60 yards, each club to shoot on its own ground on same day, and report scores by mail. The Merry Bowmen, being able to get out only five men, authorized the Highland Park Archers to disregard their lowest score in deciding the match. Consequently, the gross scores are as follows:

WABASH MERRY BOWMEN.		Totals	
W. H. Thompson	24-110	22-122	23-113
N. Thompson	21-109	21-75	20-110
Booe	21-101	21-101	23-103
Dr. McMechan	17-75	15-79	15-75
Klein	14-64	18-78	17-73
Grand total			386-1,898

HIGHLAND PARK ARCHERS.		Totals	
Swartwout	23-111	20-110	20-103
Hammond	16-68	21-85	24-110
Hall	17-87	21-105	22-102
Kyle	22-121	21-107	17-81
Dr. Weston	17-83	18-106	22-118
Grand total			491-2,366

The above score, by the Highland Park Archers, has one rather remarkable feature in it. It not unfrequently happens that the archer making the highest score, makes a less number of hits than the second or third man. But it probably very rarely happens as in the above case, that the sixth and lowest score is accompanied by the largest number of hits. This case well illustrates the different results sometimes obtained in scoring by gross scores alone, and in scoring by points, the method now adopted by the National Association in shooting for the champion medals. If we give two points for best gross score, and two for greatest number of hits, and consider each 24 arrows as itself, giving one point for score and one for hits, we shall have 12 points, and divided among the archers as follows:

Points.		Points.	
Dr. Weston	41	Mr. Kyle	1
Mr. Swartwout	21	Mr. Street	1
Mr. Hammond	21	Mr. Hall	0

In scoring by points can we more accurately determine the relative skill of the shooters, as shown in a given match? It will be noticed that two changes have been made in the different arrangements. Dr. Weston goes down to first place, and Mr. Hall from third to last. Is this fair? Points say so. Dr. Weston made the greatest number of hits, and a larger number than any member of the club ever made, and points reward him with first place. Mr. Hall, though making a fine score, was not first either in hits or score in either 24 arrows, and points put him last. In scoring by points, as a rule, the archer making the greatest score would be the winner. But we see this would not always be the case.

Cricket.

—Address all communications to "Forest and Stream Publishing Company, New York."

ORIGIN OF ROUND-HAND BOWLING.—We shall publish in next week's issue an interesting letter on the subject of the origin of round-arm bowling. It comes from an old personal friend of Mr. Wills, perhaps the only survivor who knew Mr. Wills and his charming family personally. The account differs materially from those that have been handed down in cricket annuals and companions, and will be of interest to our readers. It will be remembered that the introduction of the new style created quite a stir among cricketing circles at the time, which Mr. Wills tried on at Marylebone, we think, in 1822, but which the authorities would not permit. This excited the wrath of Mr. Wills to such a degree that he left the ground, and his place, by agreement, had to be filled up. The loss of such a man, at such a time (England vs. Kent), caused a considerable amount of ill expression by the backers of his party, although in the end Kent defeated Marylebone signally.

—Eleven Leucases played and defeated the Horeham Cricket Club Aug. 31st and 4th.

—The United States-Canada match, as above noticed, will be played in Philadelphia Sept. 13th and 14th. We sincerely trust that both the associations of Canada and the United States will arrange to place representative teams in the field. According to the rules, the actual traveling expenses of players going to Philadelphia to play against Canada will be defrayed out of the proceeds of this match.

—The Cricketers' Association of the United States has decided to arrange a match for the benefit of the association, to be played at Philadelphia Oct. 6th and 7th. It has been suggested to select eleven as follows: one composed of members under thirty, and one of those who have reached three decades.

—Eleven Americans will play eleven Englishmen, Sept. 23d and 24th, at Stenton. The Grand Club will select the English team, and the American team will be chosen by the Young America Club.

—Mr. E. Kearney, of Halifax, has kindly sent us an excellent photograph of the "Canadian team," which recently visited England. It shall be placed in our large collection of cricket pictures.

—The Philadelphia match committee has written Mr. Alexander, manager of the Australian team, that it would be unable to arrange a match as desired by him.

—The Staten Island Club's first eleven was engaged to play the Longwood team on Saturday last, but was obliged to excuse itself, as a team could not be found to go.

LONGWOOD VS. HAMILTON.—First match of the Longwood's tour to Canada. Played at Hamilton, Aug. 9th and 10th, and after a nip and tuck contest resulted in favor of the tourists by 9 runs.

LONGWOOD.		Second Innings.	
Jones, b Kennedy	0	b Woolvorton	14
Tyler, c Gillespie, b Kennedy	2	b Ferrie	10
Hubbard, c Buchanan, b Kennedy	1	run out	0
Bixby, c and b Ferrie	11	b Gillespie	11
Dutton, b Ferrie	1	b Wilson	11
Wright, c and b Ferrie	1	run out	0
Peabody, b Ferrie	11	b Buchanan, b Ferrie	3
Pickering, b Ferrie	1	b Gillespie	7
Train, not out	6	b Woolvorton	1
Prince, c Gillespie, b Ferrie	6	not out	8
Extras	3	Extras	8
Total	48	Total	77

HAMILTON.		Second Innings.	
Woolvorton, c Wright, b Dutton	12	b Wright	0
A. Heyn, J. b Dutton	1	b Jones, b Wright	8
Rogers, b Wright	1	c Jones, b Wright	8
Gillespie, b Wright	7	run out	17
Stinson, run out	0	c Tyler, b Dutton	0
Hope, c Hubbard, b Dutton	11	b Wright	7
Kennedy, c Curtis, b Dutton	2	c Bixby, b Dutton	3
Farke, c Pickering, b Dutton	0	c Prince, b Wright	16
Ferrie, b Wright	5	c Prince, b Wright	16
Buchanan, not out	10	Extras	7
Extras	3	Extras	7
Total	53	Total	63

BOWLING ANALYSIS.		BOWLING ANALYSIS.	
HAMILTON—FIRST INNINGS.		HAMILTON—FIRST INNINGS.	
Kennedy	15	15	8
Ferrie	15	15	8
Woolvorton	11	11	3
Gillespie	88	21	8
Ferrie	90	21	9
Wilson	50	16	4
Woolvorton	11	11	3

LONGWOOD—FIRST INNINGS.		Second Innings.	
Wright	83	14	9
Dutton	80	23	4
Wright	107	33	6
Dutton	95	22	7
Hubbard	1	1	0

The second match of the tour was published in our last issue; it was Longwood vs. Toronto, played at Toronto, Aug. 11th and 12th and was won by the home club by 40 runs.

LONGWOOD VS. COBORG.—Third match of the Longwood's tour to Canada. Played at Cobourg Aug. 14th, and resulted in an easy victory for the Boston gentlemen by 81 runs.

LONGWOOD.		Second Innings.	
Tyler, c Oslor, b Logan	0	c and b Logan	2
Dutton, c Hayden, b Logan	15	b Logan	7
Hubbard, c and b Logan	2	run out	15
Bixby, b Wood	1	run out	15
Jones, b Wood	0	c Hill, b Oslor	8
Wright, b Logan	9	c Hill, b Logan	8
Curtis, c Rogers, b Hall	9	c Oslor, b Logan	7
Peabody, c Rogers, b Logan	14	c Chadbourne, b Oslor	0
Train, c Hall, b Logan	2	c and b Oslor	0
Prince, not out	2	c Dutton, b Hubbard	0
Pickering, c Hayden, b Hall	2	b Hall	1
Extras	8	Extras	5
Total	72	Total	70

COBORG.		Second Innings.	
G. Hall, b Wright	0	c and b Wright	6
Hayden, b Curtis, b Dutton	14	c Prince, b Wright	6
Logan, c Curtis, b Dutton	3	c and b Wright	6
Osler, b Wright	0	c Dutton, b Hubbard	0
H. Hall, b Wright	9	c Bixby, b Tyler	5
Chadbourne, c Curtis, b Hubbard	1	not out	6
Rogers, b Wright	1	c and b Wright	6
Wood, c Dutton, b Wright	0	b Wright	5
Hall, not out	0	c and b Wright	5
Armour, c Dutton, b Wright	0	b Tyler	0
Oslor, c Pickering, b Wright	0	b Tyler	0
Extras	3	Extras	0
Total	32	Total	50

BOWLING ANALYSIS.		BOWLING ANALYSIS.	
COBORG—FIRST INNINGS.		COBORG—FIRST INNINGS.	
Logan	80	16	8
Woods	65	16	0
Hall	30	22	0
Logan	85	33	3
Hall	12	10	2
Oslor	50	12	6
Wright	85	16	8
Dutton	25	5	3
Hubbard	40	2	1
Wright	60	15	4
Hubbard	40	23	1
Tyler	16	0	3

LONGWOOD VS. MONTREAL.—Fourth and last match of the Longwood's tour. Played at Montreal, Aug. 16th, and won by the tourists by an innings and 87 runs.

MONTREAL.		Second Innings.	
Smith, b Dutton	0	c and b Dutton	0
Hubbard, b Wright	2	c Prince, b Dutton	0
Browning, c Hubbard, b Dutton	2	b Dutton	2
Liddell, c Hubbard, b Dutton	1	b Wright	0
Swinnard, b Wright	2	b Wright	12
Beesly, not out	0	b Wright	0
Dick, c and b Dutton	1	b Wright	2
McIntyre, b Wright	2	run out	0
Benjamin, c Curtis, b Dutton	2	c Train, b Dutton	0
Frazier, b Wright	4	b Wright	3
Byes	3	Byes 3, leg-byes 1	8
Total	25	Total	33

LONGWOOD—FIRST INNINGS.		Second Innings.	
Dutton, b Smith	5	Train, c McIntyre, b Brown-	10
Tyler, c Swinnard, b Smith	0	ing	10
Hubbard, c Badgley, b Smith	0	Prince, b Browning	4
Bixby, c Browning, b Smith	13	Pickering, not out	8
Wright, c Bell, b Badgley	1	Byes 3, leg-byes 1	17
Swinnard, c and b Badgley	13	Total	145
Curtis, b Liddell	13	Total	145
Peabody, c Frazier, b Badgley	3		

ANALYSIS OF BOWLING.		Second Innings.	
LONGWOOD—FIRST INNINGS.		Second Innings.	
Dutton	65	21	2
Wright	66	9	6
Wright	65	21	2
Wright	66	9	6

MONTREAL—FIRST INNINGS.

Smith	50	29	4
Badgley	45	19	4
Liddell	45	25	2
Frazier	25	13	1
Browning	23	29	0

A glance at the scores of the Longwood Cricket Club, of Boston, made during its first eleven visit to Canada, shows us that four matches were played and three of them won by the tourists. A most excellent showing. Through the courtesy of George Wright, whom we remember long before he knew "what pite meant," we have been enabled to give our readers the full scores and bowling analyses of the tour. He kindly informed us from every cricket center, and he knows whereof he writes. Unfortunately we were away from the city when his letters reached this office, otherwise they would have been published, which a want of space will not permit. He winds up by saying: "Throughout the trip we met with the best of treatment at the hands of our opponents, and it reminded one of what cricket used to be in bygone days in matches between Canada and the United States."

Subjoined are the batting and bowling averages of the four events:

PENINSULAR VS. ST. MARY'S.—Played at Detroit on Aug. 12th:—		PENINSULARS.	
First Innings.		Second Innings.	
Bamford, b Murphy	11	c McIntyre, b Moscrop	3
Heizho, b Adams	18	c McIntyre, b White	16
Smith, b Adams	7	c Dixon, b White	16
Irvine, b Murphy	0	did not bat	0
Calvert, b Murphy	3	b Adams	3
Wilde, b Murphy	31	b Cameron	3
Waterman, b Murphy	2	b Adams	3
Wiley, run out	0	b Murphy	3
Beck, b Cameron	0	b Moscrop	7
Young, not out	0	b Moscrop	1
Extras	3	Extras	8
Total	92	Total	75

ST. MARY'S.		Second Innings.	
First Innings.		Second Innings.	
Adams, b White	6	not out	3
Moscrop, b W. Smith	0	c Calvert, b White	16
Murphy, H. B., run out	23	c Calvert, b White	16
Cameron, b Smith	1	not out	15
Pepper, G. F., run out	23	b Smith	6
McIntyre, G. F., c White, b Smith	3	b White	3
White, b White	5	b Cameron	3
Kay, b White	6	b Smith	9
Irvine, run out	0	b Smith	9
Clark, J., not out	0	Extras	3
Dixon, b Smith	0	Extras	3
Extras	3	Extras	3
Total	76	Total	49

GLoucestershire VS. AUSTRALIANS.—Played at Clifton, Eng., on Aug. 2d, 3d and 4th. Won by those from the antipodes by 68 runs.

THE AUSTRALIANS.		Second Innings.	
First Innings.		Second Innings.	
A. Bannerman, c Gribble, b W. G. Grace	2	c Bengeough, b Midwinter	14
W. L. Murdoch, b W. G. Grace	2	b w. b. W. G. Grace	17
J. T. Grouse, b w. b. G. F. Grace	12	c E. M. b W. G. Grace	19
P. S. M'Donnell, c Gilbert, b Midwinter	42	c E. M. Grace, b Midwinter	7
F. W. Grace, c Townsend, b W. G. Grace	14	b W. G. Grace	11
G. J. Blackham, c Midwinter, b W. G. Grace	11	run out	0
G. J. Bonnor, c Cranston, b W. G. Grace	35	c Gribble, b W. G. Grace	35
W. G. Grace, c and b W. G. Grace	3	run out	21
H. F. Boyle, b Midwinter	10	b w. b. W. G. Grace	1
G. Alexander, b W. G. Grace	0	b Midwinter	2
W. Palmer, b Spofforth	0	not out	15
Byes 6, leg-byes 4	10	Byes 11, leg-byes 4	15
Total	110	Total	214

GLoucestershire.		Second Innings.	
First Innings.		Second Innings.	
W. G. Grace, c Boyle, b Palmer	5	b w. b. Spofforth	3
E. M. Grace, b Palmer	65	c and b Spofforth	41
Midwinter, c Boyle, b Spof-	11	c Alexander, b Spofforth	12
F. Townsend, b Palmer	3	c Murdoch, b Boyle	10
G. F. Grace, b Spofforth	25	b Spofforth	10
J. Cranston, b Palmer	1	c Bonnor, b Palmer	6
W. R. Gilbert, not out	43	c Spofforth, b Palmer	10
W. D. Moberly, b Palmer	8	b Spofforth	8
W. Palmer, b Spofforth	3	not out	1
H. W. R. Gribble, b Palmer	8	b Spofforth	1
C. S. Bengeough, c Blackham, b Spofforth	1	c Murdoch, b Spofforth	1
Byes 4	4	Byes 3, leg-byes 1	4
Total	191	Total	97

—Mr. Hadow, one of the leading cricketers of Great Britain, who visited this country with Grace's famous team, has married Lady Constance Hay, eldest daughter of the Earl and Countess of Kintore, and niece of Lady Londesborough, under whose chaperonage the young lady has been known to the fashionable world of London for the last two or three seasons.

Business or editorial departments of this paper must be directed simply
FOREST AND STREAM PUBLISHING COMPANY.
 New York City, N. Y.

A MUSICAL AND SYMPATHETIC ELEPHANT.—An American Menagerie and circus proprietor announced lately for his benefit, a learned elephant to play some pieces on a "magnificent Brinsmead." Every one rushed to hear the tusked virtuoso, and a large amount was taken at the door. Before the end a new piano was brought into the middle of the circus and the top removed. After the usual obeisances, the elephant advanced to the piano. Raising his foot, he placed it on the keys. Suddenly he uttered a fearful cry, which sounded like weeping, and occasioned no small alarm. The proprietor came forward and stuck his head in the elephant's jaws to learn the reason. Taking his head out again, he ordered the tusked virtuoso to be led away; then turning to the audience, said the elephant could not play on that piano, as

in the keys of the instrument he recognized the teeth of his mother. A broadwood was immediately telegraphed for to London. We suspect that the above, which comes to us from London, contains the covert advertisement of a piano manufacturer, but the elephant must nevertheless go on record. AN AFTER SCRATCH.—One day last week I saw my old cocker "Fannie" while going at full speed go on three legs and try to get burrs off her belly with the other; too busy to stop for burrs when there was a chance to get up a woodcock. FELLOWS.

—Some Parisian ladies have taken to frog shooting. The arm they use is a highly ornate steel cross-bow, from which a dart may be discharged with sufficient force to transfix the most corpulent and tough-skinned of frogs at a range of twenty feet. By means of a silken cord this missile is attached to the breech of the cross-bow, a contrivance enabling the successful marksman to dispense with the services of a retriever for the collection of her game. Having shot a frog, she can haul her wriggling victim to her very feet, where the duty of "bagging" it devolves upon her keeper. From five to six brace constitute a good average bag, and furnish a succulent dish of slender hind legs, delicately fried in batter.

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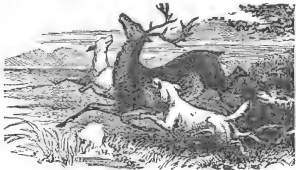
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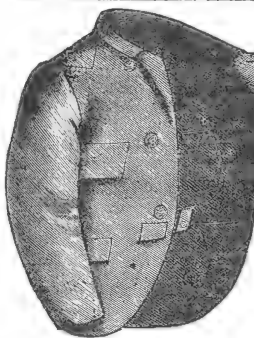
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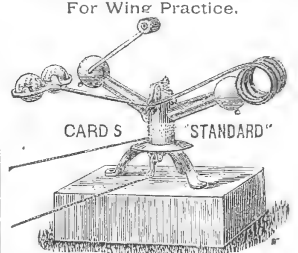
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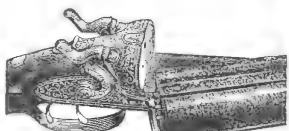
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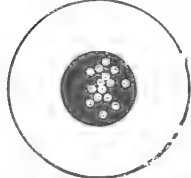
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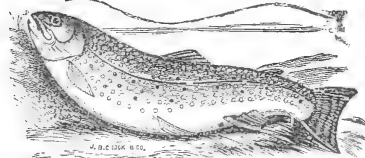
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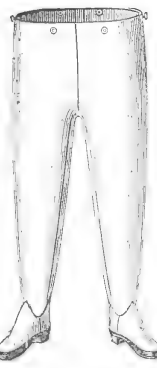


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pleasant odor and the in-door effects
of the Oil of Creosote are completely
neutralized or destroyed, and the paper
made impervious to prevent its leak-
age. Try them and you will use no others.


ing or melting in the mouth. The unprecedented popularity of "OLD JUDGE" Cigarettes is owing
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right to use it. The great advantage and importance of this invention will at once be recognized by
all smokers, and its truth demonstrated by the first "OLD JUDGE" Cigarette they smoke.

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THE DEAD DUCK IN A NATURAL POSITION IN THE WATER,
or on the ice as a decoy.



We claim that they will do ever better than any other device ever made.
They cost less than any other decoy (\$4.00 per dozen.) They weigh less.
You can carry two dozen in your hunting coat pockets, and in one minute
after shooting your duck can set it in the water in its natural position as
when alive. We make three sizes: No. 1 for mallards, No. 2 for canvas-backs,
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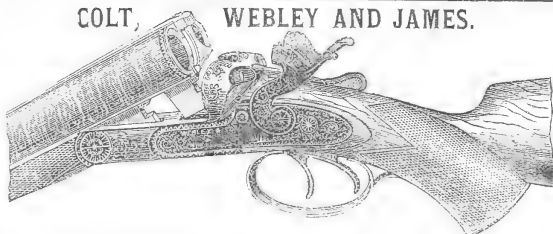
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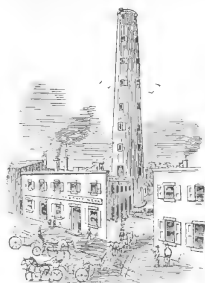
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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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NEW YORK, THURSDAY, SEPT. 2, 1880.

Volume 15—No. 3.
[Nos. 39 and 40 Park Row, New York.]

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FROM the inauguration of field trials in America, at Memphis, Tenn., in October, 1874, up to this date, this mode of practically testing what a dog really is at bottom has steadily been gaining favor in the eyes of the American breeder and sportsman. In this, and in last week's issue, the FOREST AND STREAM contains a list of the coming autumnal fixtures, the official programmes of each event, the data of management, and the rules by which each trial is to be governed and under which it is to be run. We have published these in full, acknowledging their great necessity and confidently expecting that the growing interest will increase until we shall see every State in the Union have its own field trials club and its annual competitions. Meetings of this kind are of paramount importance, not only as a means of bringing our sportsmen into contact, thus affording an opportunity for them to compare notes, and from their experience improve their breeds, but also as opening a way to infuse a greater admiration for the noblest and most intelligent of all dumb animals. Rightly conducted, field trials cannot but tend to raise the standard of the sport of shooting game birds, and greatly to increase the number of well-broken dogs. A perusal of the rules of both the National American Kennel Club and the Eastern Field Trials Club shows us that several of them have not been drawn up as carefully as we would wish to see. One in particular does not meet our views. We refer to the instruction to judges on the subject of chasing. We consider this so grievous a fault that the dog so offending should be instantly disqualified as unworthy of a place in the competition. As dogs, and particularly young ones, are imitative, it can be readily seen what a deal of harm such a bad example might produce. We would not shoot in the field with a man who owned a brute that ran his birds. Evil communications, certainly in dog flesh, as among men, are quite sure to corrupt good manners.

No laws for competitions of this kind can be too fully or plainly expressed. They should be explicit and admit of but one construction. The success of every enterprise depends upon the straightforwardness and intelligence by which it is run. Indefinite rules, framed carelessly, even by inadvertence, are liable to be twisted by interested parties so that they shall seem to mean the very opposite of what is intended. Dissension and cavil rob all true sport of its pleasures, and disgust all men of gentlemanly instincts. Wherever competitions of any kind take place there have been since the world began men who cannot take a beating in a manly way; and occasionally persons are met with who would resort to any means to bring about their own desired results. If they cannot win they do not wish to see their neighbors do so.

As a protection for the judges, the laws and instructions should be clearly given, and it will cause the gentlemen who accept the onerous office much trouble if they are not. Fortunately the selection of judges thus far has been most excellent, and we cannot let this opportunity pass without congratulating the committees we have heard from on their tact and the soundness of their choice, and their good fortune in having these gentlemen accept. As long as such men as Messrs. Morford and Wilson, Capt. Henry and Dr. Twaddell are found to the fore, there need be no fear but what every owner will get his dues.

MR. OBER'S RETURN.—Mr. Frederick A. Ober (Fred Beverly) arrived in this city, from St. Thomas, last Friday. Mr. Ober began his ornithological explorations of the Lesser Antilles in 1876 under the auspices of the Smithsonian Institution, and was engaged in them two years, when, the funds giving out, he was obliged to return, with the work unfinished. The great success of this mission in a scientific way (twenty new birds having been discovered and a vast amount of information respecting the islands having been obtained) impelled Mr. Ober to return and complete a work so auspiciously begun. But a few islands of the chain remained unexplored, and a few hundred dollars would have been sufficient to complete the survey. Even this small amount

the Smithsonian was unable to advance, and consequently Mr. Ober went out, at his own expense, to finish a work which should have been accomplished by aid from English or American scientific societies.

The result has been highly satisfactory, as several new birds have been discovered, much new information elicited regarding the topography of the islands, as well as the fauna, and the scientific world is to be, for the first time, put in possession of a complete history of the birds of the Lesser Antilles. The catalogues of the birds of each island will be published in the "Smithsonian Reports," supplementing the other various catalogues published two and three years ago. Mr. Ober has with him a live specimen of the great imperial parrot, inhabiting only a single island in the Antillean chain, and known nowhere else in the world. He sent, three years ago, the first skins of this bird that ever reached the United States, and now brings the first specimen alive. He has also a pair of agoutis—animals peculiar to South America and the West Indies—and a monkey, peculiar to one of the islands, about which the naturalists are in doubt—as to the species—whether it is an inhabitant of the new world, or was introduced from Africa.

This question, as well as many other curious and interesting problems that have vexed our scientists for years, will be settled by the specimens now in possession of Mr. Ober. He has visited every island between Porto Rico and Trinidad, and among other recent visits has paid one to the famous Boiling Lake of Dominica, which surprised the inhabitants of that island last January by an eruption of hot water, mud and stones. In the interval between his two exploring trips Mr. Ober wrote a book describing his adventures in the forests of the Caribbean Islands. This book was published by Messrs. Lee & Shepard, Boston, and has since appeared in England, meeting with a good reception on both sides the Atlantic. Having made engagements to lecture this winter, he returns to fulfill those engagements and to write out the further adventures of his recent trip.

PACIFIC COAST FISHES.—The west end of the United States Fish Commission, composed of Prof. D. S. Jordan and Mr. C. H. Gilbert, are actively at work. They have made stations for collection and study of fishes at San Diego, San Pedro, Santa Barbara, Monterey and San Francisco. Twenty-eight species, new to science, have been introduced into the system thus far by them, viz.: A sole (*Aphoristia*); a flounder (*Pleuronichthys*), and two new genera of flounders. A new ray (*Raja*); a sting-ray (*Dasyatis*); a ray of a Chinese genus (*Platyrrhina*), and a ray of a new genus; two new *Embiotocoids* (genera *Abeona* and *Brachystius*); three new blennies (*Xiphister*—two species; *Apodichthys*, one); a new *Agonus*, and a new deep water fish, which, with one previously described by Mr. Lockington, seems to constitute a new family (*Coesteidae*), and, finally, no less than thirteen new species of the "rock fish," genus *Sebastichthys*. These, with the twelve species previously known, are now all brought into the San Francisco markets with more or less frequency. Most of the new species are from deep water, and were not in the markets in Dr. Ayres' time, twenty years ago, since which time no one has attentively studied this group on our coast.

Numerous species known from further south have been added to the United States fauna. Notable among these are eight sharks: the great basking shark (*Cetorhinus*); the man-eater (*Carcharodon*); the tiger shark (*Galeocerdo*); the mackerel shark (*Isurus*); the swelling shark (*Cephaloscyllium*); the horned shark (*Pseudocorymbus*); the blue shark (*Carcharhinus*); and the oil shark (*Galeorhinus*).

JOSEPH W. LONG.—Joseph W. Long, the author of "American Wild Fowl Shooting," died recently at Oscola, Nev. Mr. Long was well known as a practical gunner, and his book holds a deservedly high place among the few books of sport that are really worth anything.

—The very interesting review of the work of the Fish Commission will repay a careful perusal. It is a good showing of results.

FOREST & STREAM

NEW YORK, THURSDAY, SEPTEMBER 2, 1880.

ANONYMOUS LETTERS.—There is one form of epistle frequently received in all newspaper offices to which, besides a cursory glance and a toss into the waste basket, no further thought is ever given. If these letters, which usually come signed "A Reader," "Truth," or perhaps by the dishonestly assumed title of some organization, are full of petty spite, unmerited personal abuse, insinuations, innuendoes, hints, vituperations, threats and stage fury, they are apt to provoke a laugh or an impatient grimace, according to the mood of the recipient, but beyond this—nothing. An anonymous letter intended for publication may be, if it finds its way into print, either contemptibly ridiculous or cowardly and mean. Consigned to the waste basket, it can be neither; and such is the fate of all such letters which come to the FOREST AND STREAM, even when their peculiarities of handwriting disclose their authorship. The individual who pens abusive letters and sends them to this office anonymously is simply wasting time, ink, paper, postage and, let us hope, is sacrificing self-respect.

GERMANS AT THE BUTTS.—The New York Schuetzen Corps, Major George Aery, captain, will hold their annual fall festival at Thompson's Pavilion, at the Highlands of Navesink, on the 14th and 15th of September. Special arrangements have been made for the transportation and hotel accommodation of the entire corps, with their invited guests. The interesting features this year will be off-hand shooting, as usual, and prize bowling by ladies. None but those accompanying the members of the association being allowed to compete. There will be a ball the first evening, and an excursion and a fishing match for the ladies the next morning.

The Sportsman Tourist.

ROUGH NOTES FROM THE WOODS.

HOW THE RED MAN WATCHES A LICK—CAMPING, COOKING AND ANGLING—INDIAN WOODCRAFT.

WHEN Chief William led up to the lick he took me by pulling streams and pleasant places. Our way led through a beaver meadow, and that same beaver meadow business is an institution, so to speak, found nowhere so frequently or in such perfection as in the Northern Wilderness. On all the waters of the Moose, wherever you find a small stream emptying into river or lake, you may with something like certainty find a beaver meadow on the course of the stream, usually about midway of the stream. The beaver is the first wild animal of importance to disappear before the white man; but there are men now living who remember when these beaver meadows were beaver ponds, with busy, sagacious, shy inhabitants. At present they are perfectly level meadows, invariably dotted with graceful, light green tamaracks, with an occasional spruce, standing singly or in groups of three or four, resting in calm quiet in the bright sunlight, scarcely moved by the furious gales that sweep the mountain tops bare of timber. From the very apex of Bald Mountain (the Mt. St. Louis of Colvin) you look down into one of these oases, a thousand feet below. You could almost throw a stone there. Quiet and motionless it lies, while the signal staff on the summit is bending before the gale, and you are fain to keep a few paces from the edge of the precipice lest a sudden gust knock you off your balance, and send you into the trees tops five hundred feet below. Far more lovely and interesting to me are these beautiful, lonely nooks than the mountains that overlook them; to me they seem to have been strangely overlooked by tourists and writers who frequent this region. This is digression.

Silently as ghosts we stole through the meadow and up to an unusually thick clump of spruce and tamarack. Through the thick foliage I looked and dimly saw three rude poles lashed to the branches twenty-five feet from the ground. Silently I commenced to climb, and soon found a seat on one pole, feet trying to rest on another. The Chief sighted a hole through the branches, made his old coat into a ball, and pitched it at my head with a force and accuracy that nearly knocked me off the perch. There was a scrambling among the branches, and the butt of William's proterous musket appeared in reach. I drew up, placed it against the left hand spruce with his old coat, and then came the butt of my rifle, followed by the head of the Chief. We sat silently and watched warily. I saw by his eye that he expected to see deer on his side of the "blind," and repented me that I had not placed his coat and blunderbuss against the other spruce. We had not long to wait. The sun was still shining with yellow, slanting rays on the light green of the tamaracks, when glancing behind and beyond the Chief, I saw the old, old, old, timid doe in the red coat, gliding cautiously into the tall grass of the meadow, ears forward and nose on the alert for any suspicious tint of enemies. We had been cautious and silent. She detected nothing wrong, and turned toward the blind; halted at forty yards between two clumps of tamaracks, and stood still to listen and sniff the air.

Now, it strikes me that I was a noble red man, and had taken a fancy to a pale face. If I had taken that pale face to my lick for a shot, and knew his rifle to be a nail-driver, I would have leaned backward a little and let the white man send a ball into the deer's vitals instead of chancing a musket with eleven small buckshot at a range of forty yards. The Chief did not see it in that light. With a slow, steady motion he cocked and raised the old piece, held it for an instant as in a vise, and then there came a faint, faintly visible, a great expansion of powder smoke, and the deer was gone. I care not. She no doubt had one or two fawns waiting for her on the hill; and being burdened with the cares of maternity would be but tough eating at the best. Even had the deer been a buck and in condition I would not have given him twenty-five cents for his shot. He laid the musket with his coat, climbed down in silence, and I saw him for a quarter of an hour hunting diligently for some sign of a hit; but he found not a trace, and he came back looking a little beaten, I thought. Then he spoke for the first time since entering the meadow.

"Watch any more?" he asked.

"No. Definitely, no. The smoke settled down on the meadow, and the grass is trampled at the very spot where the deer came in."

I pitched his coat and musket into the soft moss, followed them with my rifle, and we started for camp.

"Poor camp; our bark," said William.

I thought differently. It had a good roof of bark with back, end and sides closed in with the same. We in Pennsylvania would reckon it an excellent camp. And what a grand woodsman the Chief was. He would hardly allow me to lift a stick of firewood, but toted old dry trunks of dead trees, bark and branches, picked browse for a fresh bed, and by the time it was fairly dark we were snugly organized for sleep. I kept him awake for an hour beyond his usual time, and he gave me points concerning the wilderness, of which he is reputed to have as much and as accurate knowledge as any man living. At length he tired of stories and talk, drew his blanket about his head, Indian fashion, and subsided in sleep.

"Wake me up early; look after deer," he said the last thing before settling into a steady, subdued snore, that was not at all agreeable to me.

I sat up late—smoked, nursed, built fires and listened to my old acquaintances, the owls, until, overcome with drowsiness, I, too, pulled my blanket about my ears and slumbered sweetly, after the manner of those who rest at night in open camps.

It was daylight when I awoke. I roused first the fire, and then Chief William. He shook himself together, borrowed my rifle and was off on the trail.

"I don't let deer be back in hour," he said, laconically.

"A fool's errand," said I, and went down to the spring hole to try fly-fishing. I pooled a couple of half ponds, came back to camp, and cooked a trout breakfast in my best manner. William had been gone more than his hour; breakfast was ready and hot, and I was getting im-

patient, when far from beyond the beaver meadow on the mountain came the plain, sharp crack of my rifle. He had found the deer after all. And I ate breakfast alone.

It was past 9 A.M. when, getting impatient, I started up the trail, and at the first turn met the Chief, a smile of Christian satisfaction on his face and the limp half of a freshly-killed deer wagging at his hip. It was a bit of good hunter craft. He explained how he had quartered the ground like a setter for a hundred rods before finding blood. Once found he had followed it like a sleuth-hound, losing it again on the ridge, and finding the deer at last by patiently quartering the ground again. It was badly wounded in one kidney (all luck), but made a short run and laid down again. He crept up within thirty yards and shot it through the hip. The white hunters would ever have tracked out and killed it.

William cooked himself a hearty meal of venison, of which, being well-fed, I could not partake; and then, still insisting on carrying my traps, started to put me, by a short cut on the trail, to my next objective point,

JONES' CAMP.

Albert Jones came into the wilderness about three years ago, so sick and weak as to be lifted from the wagon, and unable to speak aloud on his arrival at the Forge House, foot of the Fulton Chain. He had been a strong man, with an iron constitution, and, like many Americans, had broken himself down by constant overwork and anxiety. He had been a business man; a miner in the early California days; a ranchman; had served and run sawmills; had been a tamer of wild horses among the Spaniards and "buckies" of Mexico, and had spent the best part of an active, vigorous life in the multifarious pursuits, chances and changes peculiar to an adventurous American.

It came to an end by a general physical breakdown. The doctors said "general debility." They always said that when they are stumped. Jones was a native of Northern New York, and in his younger days had often gone to the Wilderness for sport and recreation.

When hand and brain could work no longer he said, "Take me to the woods; if I am to die let me die there." They took him in to die. In less than two months he had so far improved as to go out and attend to business, which had rather piled up on him in his absence. One month of that settled him. He was down again, and again he "broke his holt" and came to the woods. Again he got the benefit of open air, care-free life, and when he thought himself pretty well able to manage his affairs he went out of the woods and got down to business. And it floored him in just three weeks. Then he let go and came to the Wilderness for good, as he says. He built a comfortable log camp (or house) at the foot of the Moose River stillwater, built and bought half a dozen boats, keeps boarders (when they come) at most reasonable rates, and passes his time as quietly as any man I know of. He has regained his health, spirits, and, so to speak, on the whole, make an excellent subject for "Admiral Murray," if that gentleman were writing another book.

His place is situated at the foot of navigation for the Fulton Chain, and it is a twelve mile paddle from the Forge House landing, foot of First Lake. I will only add that of all the camps I have eaten and slept at none as good a supply of good-sized brook trout as Jones' camp. And that is a fact. I took back my eighteen pound canoe and knapsack for a trip to the other side, and as much of it as I might find interesting and profitable.

I might mention that I made the acquaintance of a young man at Jones' who is a permanent boarder there, having sought the forest for relief from asthma, from which he had been a great sufferer. The relief was found, and he is another witness to the great benefit so often derived from residence in the Wilderness.

Not all invalids improve by coming here. I had a pleasant camp of bark, with open front, pointed out to me on Fourth Lake, where a young man afflicted with incipient consumption tried all last summer the effects of open air life in the Wilderness. His camp was pleasant and in a healthy location. There was nothing lacking for a fair trial, and he tried it long and fairly, but to no avail. He slept in his fathers' Scores come here for health who will tell you frankly that they might as well have staid at home. Very many receive decided and permanent benefit. Some bad cases of asthma and consumption in its first stages are, apparently, cured. One thing is certain: you pay your money, you do not always take your choice.

From Jones' I proposed to start on a canoe trip through or into any part of the woods that might strike me as interesting or desirable. In pursuance of which plan I paddled off from Jones' landing one exceedingly fine morning, reaching the Forge House in time for dinner, and realizing pretty fully the difference between up stream or down when the paddle is in question, especially as I got fogged on the course and paddled sixteen miles instead of twelve.

The Forge House, kept by J. W. Barrett, is the starting point for most parties who go to the Fulton lakes. The house is well kept, and it is a great rendezvous for guides, whose boats may nearly always be seen at the landing, where the owners come to get their boats ready for use. En passant, as this is the season both for lakemen and brook trout, and as many are deterred from visiting the woods at the best season for fishing by those intolerable nuisances, flies and mosquitos, I may as well fulfill a promise made in my last, of an infallible recipe for these pests, by using which one may walk the trails and climb mountains, fish by day and sleep by night, free from the poisonous sting of the tick or mosquito. I know there are a score of remedies all more or less effective, and I have tried most of them during the last twenty-five years. The one I have found most effective is made as follows:—

Three ounces castor oil and two ounces best tar. Bring to a slow boil on the stove in any vessel, letting it simmer for half an hour. When partially cool add one ounce of pennyroyal, and mix thoroughly. To use, pour a teaspoonful into the palm of your hand, rub your hands together, and then rub every exposed inch of skin with your palms. A light breeze will blow it off, and it will wash it off. You may have to repeat it once or twice daily for the first two days, but after that one application each day will leave you in peace. It is in no way filthy, and is not disagreeable to most persons, while the effect is all that can be desired.

NESMICK.

CAMP CREAM O'TARTAR.

NO MAN'S LAND, August, 1880.

DEAR FOREST:—You have, of course, received our invitation to "call and see us," but as you have not put in an appearance I fear the sincerity of the invitation is doubted, "wherein you wrong us deeply," as Hamlet or Ophelia, or some other of Shakespeare's magniloquent talkers said.

I have to report a terrible conflagration and explosion, with no insurance and no loss of life. Our shanty caught fire, or was set on fire, or set fire to itself last night. It was discovered by the scorching of the Major's left heel, which woke him after some time. The lake was close at hand; the Tin-dipper Company (the Doctor) went actively to work; the Scribe carried water industriously for some time in a pail, but afterwards discovered that a large tin hole had been burned in its bottom, which incapacitated it for retaining anything more fluid than a bucketful while the Major, with great presence of mind, begat a long experience under fire, kept rapidly filling his mouth with water and spouting it upon the flames. Once, by accident, he got at the wrong tumbler, and cast upon the fiery billows a mouthful of old rye. This untoward accident caused the flames to rage more fiercely, and then the Doctor's powder-flask blew up.

The scene at this time must be imagined to be appreciated. The lurid glare cast a crimson tinge upon the water, which dashed upon the beach as if in wild mockery of our misery. The lurid glare also fell upon the dark form of the Scribe, who, having discovered the hole in the pail's bottom, was lighting a cigar and cheering on the Fire Department.

As soon as the flames found nothing else to burn they subsided, and then morning broke and the sun rose, smiling as though one ought to smile back again. Then we found some trout which had been prepared for the morning meal. These we cooked over the embers of our house, and then proceeded to investigate damages.

The Doctor had suffered most. His powder-flask in exploding had blown up his cracker-box cover essay on the "Grasshopper," *The Complaint in Whortleberry Time*, and the world and the London *Lancet* loses it forever. It probably saved our lives, however. It lay upon the flask, and the heaviness of the essay, by keeping the explosion down, prevented any harm to us. Powder couldn't move it (nitro-glycerine would have had its hands full to do it), and it reposed peacefully but scorched on top of the flask's fragments. Our shanty was gone, and our shelter tents were saved, so we are comparatively happy.

We have had a great laugh at the Doctor. A countryman, with a face as hard as a billiard ball and about as expressive, told the worthy scientific man a long story about a remarkable dog, which was located on a farm about four miles away. According to the bucolic gentleman this dog was a cross between a bull terrier and a grasshopper. The grasshopper was a very good fisherman, and the world and the London *Lancet* loses it forever. It probably saved our lives, however. It lay upon the flask, and the heaviness of the essay, by keeping the explosion down, prevented any harm to us. Powder couldn't move it (nitro-glycerine would have had its hands full to do it), and it reposed peacefully but scorched on top of the flask's fragments. Our shanty was gone, and our shelter tents were saved, so we are comparatively happy.

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Natural History.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE AMERICAN ASSOCIATION MEETING.

THE twenty-ninth annual meeting of the American Association for the Advancement of Science was largely attended, and in all respects successful. The arrangements of the local committee were excellent, and everything has progressed in a most satisfactory manner.

At 2 o'clock on Tuesday, Aug. 21st, a meeting of the Cambridge Entomological Club was held, at which, after an opening address by Mr. Scudder, its President, were read a number of important papers. Among these was one by Mr. A. R. Grote on the generic characters of the *Noctuidæ*, one by Prof. A. J. Cook, treating practical apiculture, and one by Rev. H. C. McCook on the honey ants of Colorado. Prof. John L. Leconte read a paper on "Lightning Bugs," which was of great interest. A number of other contributions of value were read, among them one by Dr. H. A. Hagen on the Hessian Fly.

The opening exercises of the meeting and the general business having been accomplished during the morning of the 25th, the feature of the day was the address of Prof. Barker, the retiring President, On the Origin of Life, which excited very great interest and was listened to with deep attention. In concluding the speaker said that, physiologically considered, life had now no mysterious passages, no sacred precincts into which the unhallored foot of science might not enter, and that research had day by day diminished the phenomena supposed to be vital, and that sooner or later every action of the living body would be pronounced chemical or physical.

The session of the Physical Section, of which Prof. Asaph Hall is President, was interesting, and several astronomical and physical papers of value were read. Section B (Natural History) was addressed by Prof. Alexander Agassiz, its President, who delivered a most learned and suggestive discourse on Biological Development in the Animal Kingdom, as Manifested in the Paleontological and Embryological Study of Sea Urchins. Some of the papers read before this section are as follows: Comparative Anatomy as a Part of the Medical Curriculum, by Dr. Harrison Allen; Distinguishing Species of *Populus* and *Juglans*, by Young Naked Branches, by Prof. J. W. Bell; Observations on Japanese *Brachiopoda*, by Mr. E. S. Morse; Evolution of Parasitic Plants, by Thomas Meelian; On the So-called Fine Blight of the Apple Tree, by Mr. T. J. Burrill. In the sections of Geology, Chemistry and Microscopy important papers were read.

The session of the Permanent Sub-section of Anthropology, presided over by Major Powell, was very interesting. Prof. A. S. Bickmore's paper upon the Ethnology of Africa was illustrated by a colored map locating many of the races of that continent. Myths and Folklore of the Iroquois, by Emmine F. Smith, was listened to with close attention, and other papers of interest were read.

In the afternoon the exercises were not less interesting than in the morning, and in the evening the association listened to an address by Prof. J. Graham Bell, the inventor of the Bell telephone, who discussed the production of sound by light.

The exercises during the remaining days of the week were well attended and of great interest, but lack of space prevents our giving any detailed account of the proceedings. Cincinnati was chosen as the next meeting place, and on Tuesday the following officers were elected: President, Prof. Geo. J. Brush, New Haven, Conn.; Secretary, Prof. C. W. Riley, Washington, D. C.; Treasurer, Prof. W. S. Vaux, Philadelphia, Pa. Prof. Alfred M. Mayer, of the Stevens Institute, Hoboken, N. J., was chosen President of Section A.

A THIRTPARTITE CONTEST.

THE following anecdote comes to us from a thoroughly reliable source, and certainly deserves to be recorded. It is not often that such a combat is witnessed by a man who can give an intelligent and trustworthy account of it:—

On the 21st of July last Mr. Henry Braithwaite, of Frederickton, an experienced hunter, when engaged in exploring timber lands in the interior of New Brunswick, between the headwaters of the Northwest Miramichi and those of the Tobique, witnessed an unequal contest, such, indeed, as was probably never witnessed by any other person. In his expedition he was accompanied by a well-known Micritic Indian, usually called by hunters "Big Louis."

When traveling up the inlet of the Big Southwest Miramichi River, about 5 or 6 o'clock in the afternoon, Mr. Braithwaite heard at a distance of a quarter of a mile a very strange noise, which he describes as a combination of growling and bellowing, which increased as he advanced toward it. On turning to Louis and asking his opinion of the cause of this noise, the Indian replied, "Bears fighting."

At the time that Mr. B. heard this noise his small Wesson rifle was unloaded, and he had but two cartridges in his pocket, the rest being in his bundle, and not easily reached. Starting with these two, Louis called gently to him, "Take more cartridges in your pocket."

Mr. Braithwaite replied, "If I stop to get the cartridges the noise may stop, and I may not be able to find the game," and accordingly pushed on with but two cartridges, throwing off at the same time his bundle, expecting Louis to bring it along with his own. He, however, failed to do this, and left both behind, and followed after with but his axe. At a distance of 100 yards, after running a quarter of a mile, Mr. Braithwaite saw the causes of the strange and unwanted sounds.

A huge bear, the largest that he ever saw, and he has seen many, was seated on top of a young moose, upon which he had sprung anawares, breaking his back at the first jump. Whenever the animal attempted to struggle the bear would seize him by the neck and shake him as a dog would a hare. When the moose remained quiet the bear would lick the blood which issued from his wounds.

Running up to within twenty yards of the bear, loading in the meantime, Mr. Braithwaite leveled his rifle, and not being able to get a fair view of the bear's head, fired where he supposed the animal's heart to be. The ball passing through him, the latter sprang back off the moose, and staggered and fell, the blood running from both sides. After retreating a few steps he stopped, and looked around to see where the shot came from. Not being able to get a fair view of his head, Mr. B. again fired at the same part of his body, and again struck him. This seemed to give him new energy, and he started off on a run for the stream.

Mr. B. then turned around to the Indian, thinking that he had the bundle with the cartridges, intending to load and follow, but found that he had not brought up his ammunition. There was nothing left but to go back, which Mr. B. did, and reloaded. It took some time to find the bundles, and in the meantime a heavy thunderstorm, accompanied by rain, had set in. They took up the trail and followed it easily, guided by the feet marks and blood, for about 200 yards; the woods then getting very open, the rain had washed out the blood and tracks, so that they lost the trail, and as night was coming on, returned to the moose and prepared to camp.

The moose they found nearly dead; it was a spring calf, and would weigh about 500 pounds. After dressing the meat and cooking some for supper, they laid down to rest. It rained nearly all night, and as all they had in the way of provisions was the moose meat, and they had eight miles to go for bread, they did not follow up the bear, which they could have done. The moose hide the Indian carried to the settlement.

✓ **KINGBIRDS CATCH FISH.**—*Editor Forest and Stream*.—Probably most observing people have noticed with what unerring expertness the kingbird (or bee martin) will catch insects in the air. These birds are very abundant about my premises, nesting in some cases within a few feet of my residence. I never disturb them, believing them not only a valuable insectivorous bird, but having frequent ocular demonstrations of their valuable services in driving off hawks and crows. I have often noticed them striking the surface of the water in my fish ponds, but supposed they were either taking a bath or else catching insects which were flying near the surface of the water. When I constructed my bass pond, a few years ago, I stocked it with minnows to afford ample food for the bass. At times the entire surface of the pond seems alive with them. A few days ago I observed at least a half dozen kingbirds perched on trees and bushes near the margin of the pond, and almost every moment some of them would dive into the water precisely like a kingfisher, and I concluded they were catching bugs or other insects which were floating upon the surface of the water. Watching them closely, I soon saw one of them leave the water with something perceptibly shining in its bill. It alighted on a tree about fifty yards from where I was sitting, and acted precisely as a kingfisher does when killing a fish. Taking a telescope, I also took an observation and discovered that the kingbird had a minnow not less than three inches long. I continued my observations for about fifteen minutes, and during that time these birds caught several small minnows and ate them. Others more observant may have long known of this trait of the kingbird, but I have never chosen to read or hear of it, and quite likely may be laughed at for my tardiness in reporting what may be well known to every ornithologic amateur.

MILTON P. PERCE.

✓ **A CONUNDRUM.**—*Stunnerpet, St. Clair County, Ill., Aug. 24.*—In the spring I shot a heron which was carrying in its bill a dead snake about fifteen inches in length. Some five inches of the reptile's tale was drawn through a slit in the lower mandible of the bird, and was held there so firmly, even after the bird was dead, that the snake would have been torn to pieces easier than withdrawn from the bird's bill. How does the bird get the snake there?

G. B. K. S.

We do not get from our correspondent's description any very clear idea of how the snake was attached to the bird's bill. Was the bill split along the side, or did the snake lie between the vami of the mandible and pass through the chin?

✓ **CROWS AS FRUIT THEIVES.**—*Editor Forest and Stream*.—I send you the following from a late paper, and can supplement it with a little experience of my own: "Malachi F. Dodge, living near Manchester, N. H., recently saw five large crows descend from a tall pine tree in the Stark woods and alight in a tree laden with ripe August apples. Each crow planted its bill firmly into a rosy specimen, and, detaching it from the stem, flew away with the prize to the pine, where they ate the fruit with evident relish." A short time ago I happened to notice the almost daily visit of a small party of crows to a certain tree in my apple orchard, and it occurred to me that the fruit might be the attraction, as it was a large, tender and sweet variety. A visit to the tree proved my surmise to be correct. They had destroyed quite a number of apples by pecking out from a quarter to a half. When the stem would give way the apple fell and another would be attacked. This may be nothing new, but in living on a farm constantly visited by crows for nearly thirty years, I have never had occasion to accuse them of mischief before, though the inclination was strong enough without it. If any of your readers have had a similar experience I hope we shall hear from them. Respectfully yours,

F. C. BROWN,

Framingham, Mass., Aug. 25th.

✓ **AN UNLUCKY CROW.**—Mr. George G. Cole has related to us the following incident, which occurred not long since near Glen's Falls, N. Y.: Mr. H. P. Champney, of that place, being annoyed by large hawks which prey upon his chickens, keeps his shot gun loaded and kills a great many of them. A short time ago a hawk was seen approaching the house, but before the owner could seize his gun the bird had passed out of range and was passing over a piece of woods. Here it was seen to seize a crow, and after coming nearly to the ground to bear it heavily and alight a short distance further on among some tall weeds. Curiosity prompted Mr. Champney to proceed to the spot, where he found hawk and crow still struggling on the ground, and by a lucky shot killed both of them. The hawk, from the meager description given of it, would appear to have been a young goshawk.

Fish Culture.

THE FIRST DECADE OF THE UNITED STATES FISH COMMISSION.

ITS PLAN OF WORK AND ACCOMPLISHED RESULTS, SCIENTIFIC AND ECONOMIC.

BY G. BROWN GOODE.

There are nine departments of the government devoted, in part or wholly, to researches in pure and applied science—the Geological Survey; the Coast and Geodetic Survey; the Naval Observatory; the National Museum; the Department of Agriculture; the Entomological Commission; the Tenth Census, with its special agencies for the study of the natural resources of the country; the Smithsonian Bureau of Ethnology, and the Commission of Fish and Fisheries. The Smithsonian Institution, established upon an independent foundation, should also be mentioned, as well as the Medical Museum of the army, and the various laboratories under the control of the Army and Navy Departments.

The Geological Survey is not now carrying on any of the schemes of zoological and botanical investigation engaged in by its predecessors.

The work of the Entomological Commission and that of the census, though of extreme importance, are limited in scope and duration, while that of the Agricultural Department is necessarily, for the most part, economic.

The work of the National Museum is chiefly confined to the study of collections made by government surveys or individual collectors and sent in to be reported upon. The work of the Fish Commission, in one of its aspects, may perhaps be regarded as the most prominent of the present efforts of the government in aid of aggressive biological research.

On the 9th of February, 1874, Congress passed a joint resolution which authorized the appointment of a Commissioner of Fish and Fisheries. The duties of the Commissioner were thus defined: "To prosecute investigations on the subject of the diminution of valuable fishes with the view of ascertaining their habits and what diminution in the number of the food-fishes of the coast and the lakes of the United States has taken place; and, if so, to what causes the same is due; and also whether any and what protective, prohibitory or precautionary measures should be adopted in the premises, and to report upon the same to Congress."

The resolution establishing the office of Commissioner of Fisheries required that the person to be appointed should be a civil officer of the Government, of proved scientific and practical acquaintance with the fishes of the coast, to serve without additional salary. The choice was thus practically limited to a single man for whom, in fact, the office had been created. Prof. Baird, at that time assistant secretary of the Smithsonian Institution, was appointed and entered at once upon his duties.

The summer of 1880 marks the tenth season of active work since its inception in 1871. The Fish Commission now fills a place of more extensive and useful than at first. The present essay aims to show, in a general way, what it has done, is doing and expects to do—its purposes, its methods, its results.

THE PLAN OF WORK.

The work is naturally divided into three sections:—
1. The systematic investigation of the waters of the United States and the biological and physical problems which they present. The scientific studies of the Commission are based upon a liberal and philosophical interpretation of the law. In making his original plans the Commissioner insisted that to study only the food-fishes would be of little importance, and that useful conclusions must needs rest upon a broad foundation of investigations purely scientific in character. The life history of species of economic value should be understood from beginning to end, but no less requisite is it to know the histories of the animals and plants upon which they feed or upon which their food is nourished; the histories of their enemies and friends, and the friends and foes of their enemies and friends, as well as the currents, temperatures and other physical phenomena of the waters in relation to migration, reproduction and growth. A necessary accompaniment to this division is the amassing of material for research to be stored in the National and other museums for future use.

2. The investigation of the methods of fisheries of past and present, and the statistics of production and commerce of fishery products. Man being one of the chief consumers of fish, his tastes and upon their abundance must be studied. Fishery methods and apparatus must be examined and compared with those of other lands, that the use of those which threaten the destruction of useful fishes may be discouraged, and that those which are inefficient may be replaced by others more serviceable. Statistics of industry and trade must be secured for the use of Congress in making treaties or imposing tariffs, to show to producers the best markets, and to consumers where and with what their needs may be supplied.

3. The introduction and multiplication of useful fish species throughout the country, especially in waters under the jurisdiction of the general government, or those common to several States, none of which might feel

*Read before the American Association for the Advancement of Science, Boston, Aug. 25th, 1890.

willing to make expenditure for the benefit of the others. This work, which was not contemplated, when the Commission was established, was first undertaken at the instance of the American Fish Cultural Association, whose representatives induced Congress to make a special appropriation for the purpose. This appropriation has since been renewed every year on a more bountiful scale, and propagation is at present by far the most extensive branch of the work of the Commission, both in respect of number of men employed and quantity of money expended.

Although activity in this direction may be regarded in the light of applied rather than pure scientific work, it is particularly important to the biologist, since it affords opportunities for investigating many new problems in physiology and embryology.

The origin of the Commission, its purposes, and methods of organization, having been described, it now remains to review the accomplished results of its work. In many departments, especially that of direct research, most efficient services have been rendered by volunteers; in fact, a large share of what has been accomplished in biological and physical exploration is the result of unpaid labor on the part of some of the most skillful American specialists. Although it would be interesting to review the peculiar features of each of each investigation, the limits of this paper will not allow me to do so, or even to mention them all by name.

Since the important fisheries center in New England, the coast of this district has been the seat of the most active operations in marine research. For ten years, the Commissioner, with a party of specialists, has devoted the summer season to work at the shore, at various stations along the coast, from Connecticut to Nova Scotia.

A suitable place having been selected, a temporary laboratory is fitted up with the necessary appliances for collection and study. In this are placed from ten to twenty tables, each occupied by an investigator, either an officer of the Commission, or a volunteer. From 1878 to 1879, important aid was rendered by the Secretary of the Navy, who detailed for this service a steamer to be used in dredging and trawling, and this year the steamer built expressly for the Commission is employed in the same manner.

The regular routine of operations at a summer station includes all the various forms of activity known to naturalists—collecting along the shore, seining upon the beaches, setting traps for animals not otherwise to be obtained, and scraping with dredge and trawl the bottom of the sea, at depths as great as can be reached by a steamer in a trip of three days. In the laboratory are carried on the usual structural and systematic studies; the preparation of museum specimens and of reports. Since the organization of the Commission, the deep sea work and the investigation of invertebrate animals has been under the charge of Prof. Verrill, who had for many years before the Commission was established been studying independently the invertebrate fauna of New England.

In addition to what has been done at the summer stations, more or less exhaustive investigations have been carried on by smaller parties on many parts of the coast and interior waters. The fauna of Grand Rapids, and other off-shore fishing grounds, has been partly explored. In 1872, 1873 and 1874 dredging was carried on from the coast survey steamer *Bache*, by Prof. Packard and Mr. Cooke, Prof. Smith, Mr. Harger and Mr. Rathbun. In 1879 Mr. H. L. Osborne spent three months in a cod schooner collecting material on the Grand Banks, and Mr. N. P. Scudder as long a time on the halibut grounds of Davis' Straits.

A most remarkable series of contributions have been received from the fishermen of Cape Ann. When the Fish Commission had its headquarters at Gloucester, in 1878, a general interest in the zoological work sprang up among the crews of the fishing vessels, and since that time they have been sending each other in efforts to find new marine life. Their activity has been stimulated by the publication of lists of their donations in the local papers, and the number of separate lots of specimens received, to the present time, exceeds eight hundred. Many of these lots are large, consisting of collecting-tanks full of alcoholic specimens. At least thirty fishing vessels now carry collecting-tanks on every trip, and many of the fishermen, with characteristic superstition, have the idea that it insures good luck to have a tank on board, and will not go to sea without one. The number of specimens acquired in this manner is at least fifty or sixty thousand, most of them belonging to species unobtainable. Each halibut vessel sets, twice daily, lines from ten to fourteen miles in length, with hooks upon them six feet apart, in water twelve hundred to eighteen hundred feet in depth, and the quantity of living forms brought up in this manner, and which had never hitherto been saved, is very astonishing. Over thirty species of fishes have thus been added to the fauna of North America, and Prof. Verrill informs me that the number of new and extra-limital forms thus placed upon the list of invertebrates cannot be less than fifty.

A permanent collector, Mr. Vinal N. Edwards, has been employed at Wood's Holl and vicinity since 1871, and many remarkable forms have also been discovered by him.

As to dredging has yet been attempted by the Commission south of Long Island, though much has been done in shore work, especially among the fishes, by special agents and friends of the Commission, and by the parties stationed here and there in the work of fish-culture. Mr. E. G. Blackford, of Fulton Market, New York, by carefully watching the market slabs, has added at least ten species of fishes to the fauna of the United States. Mr. S. B. Mather is studying the fish of Long Island and the Sound. Mr. Yarrow, Mr. Earle, and others, have collected from Cape May to Key West. The Gulf States' coast was explored last winter by a party conducted by Mr. Silas

Stearns, who spent nine months in studying the food and the census. The entire Pacific Coast has been scoured by Prof. Jordan for the Commission and the census, and the ichthyology of that region has been enriched by the discovery of sixty species new to the fauna, forty of them being new to science. A similar investigation on the great lakes has been carried over a period of several years by Mr. Milner and Mr. Kumlien. The ichthyology of the rivers of the country has received much attention from the many experts employed by the Commission in fish-culture.

In addition to these local studies may be mentioned the general explorations such as are now being carried on for the oyster, by Mr. Ernest Ingersoll and Mr. John F. Ryder, for the shad by Col. McDonald, for the smelt and the Atlantic salmon by Mr. C. G. Atkins, and the quinnat salmon by Mr. Livingston Stone.

A partial indication of what has been accomplished may be found in the number of species added to various faunal lists. Take, for instance, the cephalopod mollusks of New England. In Prof. Verrill's recently published monographs twenty species are mentioned, thirteen of which are new to science. Ten years ago only three were known.

I am indebted to Prof. Verrill for the following estimate of the number of species added within the past ten years to the fauna of New England, mainly by the agency of the Commission:—

Family Known. Additions. New Known.		
Crustacea.....	163	238
Psycrognatha.....	2	15
Amneida.....	67	233
Vermes.....	.....	.....
Mollusca.....	.....	.....
Echinozoata.....	.....	.....
Anthozoa.....	23	51
Eurysiphonia.....	.....	.....
Volvox.....	56	91
Brachiopoda.....	10	147
Sponges.....	10	10
Aculeata.....	.....	.....
	800	1,000
		1,890

It is but just to say that many of these species were obtained by Prof. Verrill in the course of his independent explorations in Maine and Connecticut previous to 1871.

A similar estimate for the fishes indicates the discovery of at least one hundred species on the Eastern Atlantic coast within ten years; half of these are new to science. Forty species have been added to the fauna north of Cape Cod; sixteen of these are new and have been found within three years; seventeen have been described as new from the Gulf of Mexico; sixty and more have been added upon the West coast. The results of the summer's campaigns are worked in winter in the Peabody Museum of Yale College, under the direction of Prof. Verrill, and by the specialists of the National Museum.

One of the important features of the work is the preparation of life histories of the useful marine animals of the country, and great quantities of material have been accumulated relating to almost every species. A portion of this has been published, more or less complete biographical monographs having been printed on the bluefish, the scup, the menhaden, the salmon and the whitefish, and others are nearly ready.

Another monograph which may be referred to in this connection is that of Mr. Starbuck on the whale fishery, giving its history from the earliest settlement of North America.

The temperature of the water in its relation to the movements of fish, has from the first received special attention. Observations are made regularly during the summer work, and at the various hatching stations. At the instance of the Commissioner, an extensive series of observations have for several years been made under the direction of the chief signal officer of the army, at light-houses, lightships, life-saving and signal stations, carried on board, along the whole coast. This year thirty or more fishing schooners and steamers are carrying thermometers to record temperatures upon the fishing grounds, a journal of the movements of the fish being kept at the same time. One practical result of the study of these observations has been the demonstration of the cause of the failure of the menhaden fisheries of the coast of Maine in 1879—the failure on account of which nearly 2,000 persons were thrown out of employment.

Another important series of investigations carried on by Commander Beardsley, of the navy, shows the error of the ordinary manner of using the Casel Miller deep sea thermometer; still another series made by Dr. Kidder, of the navy, and to be carried out in future, had for its object the determination of the temperature of the blood of marine animals.

Observations have also been made by Mr. Milner upon the influence of a change from sea water into fresh water and from fresh water into sea water upon the young of different fishes.

Mr. H. J. Rice carried on series of studies upon the effect of cold in retarding the development of incubating fish eggs.

A series of analyses have been made by Prof. Atwater to determine the chemical composition and nutritive value of fish as compared with other articles of food. This investigation is still in progress.

In connection with the work of fish culture much attention has been paid to embryology. The breeding times and habits of nearly all of our fishes have been studied, and their relations to water temperatures. The embryological history of a number of species, such as the cod, shad, alewife, salmon, smelt, Spanish mackerel, striped bass, white perch, and the oyster, have been obtained under the auspices of the Commission, by Messrs. Brooks, Ryder, Schaffer, Rice, and others.

The introduction of new species in water in which they were previously unknown, is of special interest to the student of geographical distribution. Through the agency of the Commission the German carp has already been placed in nearly every State and Territory, and the work of distribution is only just begun, and the *Carassius auratus*, and the golden orfe (*Idus melanotis*), have been acclimated; the shad has been successfully planted in the Mississippi Valley and on the coast of California, and the California salmon in the rivers of the Atlantic slope. The maraena, or lake whitefish, of Europe, has been introduced into a lake of Wisconsin. It is not my purpose to speak of the great success in stocking with shad and salmon several rivers in which the supply was almost exhausted, and in planting the

Schodick salmon in numerous lakes. As an act of international courtesy, California salmon have been successfully introduced into New Zealand and Germany. The propagation work has increased in importance from year to year, as may be seen by the constant increase in the amount of the annual appropriation. A review of the results of the labors of the commission in increasing the food supply of the country, may be found in the annual reports, the rude appliances of fish culture in use ten years ago have given way to scientifically devised apparatus, by which millions of eggs are hatched where thousands were, and the demonstration of the possibility of stocking rivers and lakes to any desired extent has been greatly strengthened. This work was for six years most efficiently directed by the late Mr. James W. Milner, and is now in charge of Maj. T. B. Ferguson, also commissioner for the State of Maryland, by whom has been devised the machinery for propagation on a gigantic scale, by the aid of steam, which is now so successfully in use.

The investigation of the statistics and history of the fisheries has perhaps assumed greater proportions than was at first contemplated. One of the immediate causes of the establishment of the Commission was the dissension between the line and net fishermen of Southern New England with reference to laws for the protection of the deer and the cod fishery of that region. The work of Prof. Baird, as Commissioner, was to investigate the causes of this deterioration, and the report of that year's work includes much statistical material. In the same year a zoological and statistical survey of the great lakes was accomplished, and various circulars were sent out in contemplation of the preparation of monographic reports upon the special branches of the fisheries, some of which have already been published.

In 1877, the Commissioner and his staff were summoned to Halifax to serve as witnesses and experts before the Halifax Fishery Commission, then charged with the settlement of the amount of compensation to be paid by the United States for the privilege of participating in the fisheries of the Provinces. The information at that time available concerning the fisheries was found to be so slight and imperfect that a plan for a systematic investigation of the fisheries was arranged and partially undertaken. The work was carried on for two seasons with some financial aid from the Department of State. In 1879 an arrangement was made with the Superintendent of the Tenth Census, who agreed to bear a part of the expense of carrying out the scheme in full. Some thirty trained experts are now engaged in the preparation of a statistical report on the present state and the past history of the fisheries of the United States. This will be finished next year, but the subject will hereafter be continued in monographs upon separate branches of the fisheries, such as the Halibut Fishery, the Mackerel Fishery, the Shad Fishery, the Cod Fishery, the Herring Fishery, the Smelt Fishery and various others of less importance.

DISTRIBUTION OF ZOOLOGICAL COLLECTIONS.
Hundreds, and even thousands of specimens of a single species are often obtained. After those for the National Museum have been selected, a great number of duplicates remain. These are identified, labeled and made up into sets for exchange with other museums and for distribution to schools and small museums. This is in accordance with the time-honored usage of the Smithsonian Institution, and is regarded as an important branch of the work. Several specialists are employed solely in making up these sets and in gathering material sets of plants in alcohol, including at least ten thousand specimens, have been sent out, and fifty sets of invertebrates, embracing one hundred and seventy-five species and two hundred and fifty thousand specimens. One hundred smaller sets of representative forms are intended for educational purposes, to be given to schools and academies, are now being prepared.

The arrangement of the invertebrate duplicates is in the charge of Mr. Richard Rathbun; of the fishes, in that of Mr. E. S. Beane.

Facilities have also been given to many institutions for making collections on their own behalf.

Six annual reports have been published, with an aggregate of 5,650 pages. These cover the period from 1871 to 1878. Many papers relating to the work have been published elsewhere—particularly descriptions of new species and results of special faunal exploration.

AN EPILOGUE OF THE HISTORY OF THE COMMISSION, 1871.

The Commissioner, with a party of zoologists, established the first summer station at Wood's Holl, Mass., and assistants being engaged in a similar work at Cape Hatteras and the Great Lakes. He also personally investigated the alleged decrease of the fisheries in Southern New England, taking the testimony of numerous witnesses.

1873.

This year the summer station was at Eastport, Maine, particular attention being paid to the herring fisheries. The survey of the Great Lakes was continued. Dredging, under the direction of Prof. Packard, was begun on the off-shore banks. At the instance of the American Fish Cultural Association, Congress requested the Commissioner to take charge of the work of multiplying valuable food fishes throughout the country. Work was begun on the shad, salmon and whitefish, and the eggs of the European salmon were imported.

1874.

The summer headquarters were fixed at Portland, Maine. The opportunities for research were greatly increased by the aid of the Secretary of the Navy, who granted the use of an eighty-ton steamer.

Exploration in the outer waters between Mt. Desert and Cape Cod were carried on in the United States Coast Survey steamer *Bache*. Operations in fish culture were carried on upon an extensive scale.

1874-1875.

In 1874 the zoological work centered at Noank, Conn. The attempt was made to introduce shad into Europe. The survey of the Great Lakes was continued, with aquarium, where a permanent seasonal laboratory, with aquarium, was now established. The number of investigations this year was about twenty. The increase in the propagation work was proportionately much larger.

1876.

This year the Commissioner was unable to take the fishes and useful invertebrates in behalf the Commission

* The number of dredging and trawling stations on record is as follows:—

1872. Wood's Holl.....	315
1872. Eastport, 200 by hand, 35 by steamer.....	235
1873. Portland.....	119
1873. South.....	223
1875. Wood's Holl.....	169
1877. Salem.....	.....
1878. Gloucester.....	378
1879. Provincetown.....	.....
Total.....	1,500
The number of seine hauls is about 600.	

field for fishery investigations, having been instructed to exhibit, in connection with the Philadelphia International Exhibition, the methods of fish culture and the American fisheries. Much, however, was accomplished by single investigators in various localities. The propagation work continued. This year the first carp were introduced from Germany.

1877.

The field of investigation was resumed at Salem, Mass., and later at Halifax, N. S. A larger steamer of 300 tons made deep sea research possible. The Commissioner and his staff served as experts before the Halifax Fishery Commission. The propagating work was on the increase, and the government carp ponds were established in Washington.

1878-1879.

In 1878 the summer station was at Gloucester, Mass., in 1879 at Provincetown. These centers of the fishing interests were selected that more attention might be devoted to studying the history, statistics and methods of the sea fisheries. A plan for the systematic investigation which seemed yearly more necessary in view of the dissensions between the governments of the United States and Great Britain. In 1879 a combination was formed with the Superintendent of the Tenth Census, by which the Commissioner was enabled to carry more rapidly forward this branch of the work. Specialists were dispatched to all parts of the country to study the biological, statistical and practical aspects of the fisheries. In 1878 the breeding of cod and haddock was accomplished at Gloucester. In 1879 the propagation of the oyster was accomplished by cooperation with the Maryland Commission, under the direction of Maj. Ferguson, and the distribution of the carp throughout the country was begun.

1880.

The summer station is at Newport, R. I. The Fish Hawk, a steamer of 481 tons, constructed expressly for the work of the commission, lies at the wharf, now equipped for scientific research, later to be employed in the propagation of sea fish, such as the cod and the mackerel. Over fifty investigations are in the field in the service of the commission. The season was opened by the participation of the commission in the International Exhibition at Berlin. The first honor prize, the gift of the Emperor of Germany, was awarded to Prof. Baird, not alone as an acknowledgement that the display of the United States was the most perfect and most imposing, but as a personal tribute to one who, in the words of the President of the Deutscher Fischerei Verein, is regarded in Europe as the first fish culturist in the world.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN SEPTEMBER.

FRESH WATER.

Grayling, *Thymallus tricolor*.
Landlocked Salmon, *Salmo salar*.
Lake Trout, *Salmo namaycush*.
Muskellunge, *Esox lucius*.
Pickering, *Esox reticulatus*.
Pike or Pickerel, *Esox lucius*.
Pike-perch (wall-eye, *perca flavescens*).
Striped Bass, *Morone americana*.
Yellow Perch, *Perca flavescens*.
Striped Bass, *Morone americana*.
White Bass, *Morone chrysops*.
Black Bass, *Morone nigra*.
Rock Bass, *Ambloplites*.
Shore Whiting, *Merluccius littoralis*.
Wet-mouth, *Chenobranchius gulosus*.
Carp, *Cyprinus carpio*.
Pomoxis, *Pomoxis nigromaculatus*.
Bachelors, *Pomoxis annularis*.
Chub, *Scombrus corporalis*.

SALT WATER.

Sea Bass, *Centropristis atrarulus*.
Sheepshead, *Archamia probatocephalus*.
Porgie, *Diabolus argenteus*.
Striped Bass, *Morone americana*.
White Perch, *Morone americana*.
Spot, or Latigo, *Leiostomus xanthurus*.
Sea Trout, *Salmo trutta*.
Tautog, *Tautoga onitis*.
Pollock, *Pollockus carbonarius*.
* In Maine until Sept. 15th.

HOW BIRDS DESTROY FISH.—We have believed with Prof. Goode that the fishes taken from the sea by man was but a fraction of what is destroyed by their enemies in the water, as fish, seals, etc., and by the birds. Prof. Goode made this statement in reference to the capture of the menhaden for oil, and its destruction by the hundreds of different kinds of enemies, who number far into the millions of individuals. In speaking of the destruction of herrings by the gannets a recent writer in *Nature* says:—

Of the five Scotch stations where the gannet breeds, the number of birds frequenting each is put down as follows: Ailsa Craig, 12,000; the Bass Rock, 12,000; St. Kilda, 50,000; the Stack, 50,000; Gulla Sgeir, 300,000, or a total of 424,000. Each of these birds would consume at least a dozen herrings in the day if it could get them; but, estimating the daily average as six to each gannet produces 2,544,000 as the quantity consumed in one year, and reckoning 800 herrings to the barrel gives us 1,160,700 barrels captured by the gannets, as against 750,000 barrels, the total taken by fishermen on the west coast of Scotland for 1872.

SALMON OF THE PACIFIC COAST.—Humboldt Harbor, Portland, Alaska Territory, July 19th. Editor *Forest and Stream*.—In your paper of May 13th I have seen a note by my friend, Prof. Jordan, on the redfish of Idaho, which he thinks is the same as the species figured in *FOREST AND STREAM* of Nov. 13th, 1879, and afterwards received from Capt. Bendire in the U. S. National Museum. I have examined Capt. Bendire's specimens and am prepared to say that they are Kennerly's salmon, *Salmo kennerlyi*, of Suckley, *Oncorhynchus kennerlyi*, of Gill and Jordan. They are not different, except in size, from the types of Kennerly's salmon. Now, unless this salmon is identical with the *nerka* studied by Prof. Jordan, we have no right to call Capt. Bendire's redfish *nerka*. I have not yet seen a salmon in Alaska which I can positively identify with *O. nerka*, but

in the systematic work of Gill and Jordan one receives the impression that it is much like *quinnat*. Kennerly's salmon is not closely like *quinnat* in some respects; for instance, it has a much greater number of teeth in the middle of the roof of the mouth, and its jaws are much more oblique.

The name redfish is a source of confusion. In some localities it is safe to assume that the red color of the skin is the foundation for the name. In Cook's Inlet the color of the flesh gives rise to the name, and it is certainly well founded there, the deep red of the drying fish brightening up whole villages in the fishing season.

I have not seen the Yukon redfish, but there is reason to believe that it is one of the small scaled species.

It was my intention to publish a somewhat extended notice of Capt. Bendire's specimens last spring, but my preparations for collecting in Alaska, and various other duties, prevented me from doing so. Perhaps, after all, it is just as well to let the salmon family rest until we have material enough to enable us to settle on the rightful names and hold to them.

TARLTON H. BEAN.

With such investigators as Dr. Bean and Prof. Jordan after them the salmon of the Pacific coast will soon have to give up their family secrets, and allow their relationships to be published to the world. It would be interesting to know the exact time covered by the spawning of each alleged species, as this would show the possibility of some of them being hybrids.

BIG BASS IN VERMONT.—Sheldon, Vt., Aug. 16th.—On the 14th inst. Mr. H. Cassel and myself, with our better halves, and Mr. B. Thomas, visited Bass Lake, or, as it is commonly called, Franklin Pond, where we made a big catch of small-mouthed bass. We used live minnows for bait, and caught the most of our fish between the hours of 6 and 9 A.M. in about fifteen feet of water. I tried fly-fishing, and only took a few small bass in shallow water, which caused me to take to the minnows and deeper water. I selected five of my largest fish and they weighed as follows: 41 lbs., 4 lbs., 4 lbs., 51 lbs., and 51 lbs. My scales were rusty and gave light weights. Friend Casseau followed me closely in size of his fish. We both used Scribner's light greenheart rods. My better half scored next in numbers, leaving Mrs. C.—and Thomas far in the rear. The bass are being well protected here during the close season, which makes this lake the best bass lake in the State, and will afford plenty of sport between now and 1st of November to all "jolly anglers" who may visit its waters.

STANSTEAD.

We would like to see a "small-mouth" of the weights given. We often hear of them, but on examination they have always turned out to be the "big-mouth." If our correspondent is positive as to species, we would advise him to send one to the Smithsonian.

The black basses grow very large in the Southern waters, but we have doubted whether the "small-mouth" exceeded four pounds in any Northern State.

BASS AND PIKE-PERCH FISHING IN THE SUSQUEHANNA.—Harrisburg, Aug. 7th.—Having read your valuable paper for some time, I have never seen any notes of fishing on this river. About ten years ago black bass were introduced into this river through the efforts of a few gentlemen of Harrisburg, who worked with perseverance for two or three years, but they at last succeeded in stocking the river so that it is now an easy day's work to catch as high as thirty a day—frequently you hear of catches ranging between forty and sixty. "The bait used is loads, minnows, crabs and blagmites." They will also readily take the troll. As for fly-fishing, although very few fish for them that way here, it is exceedingly good, and as many as six or seven can be caught in the evening by fishing in water about three to five feet deep, where there is plenty of eel grass, as the bass lie in this the same as trout in moss. "Salmon" (pike-perch) fishing last fall was better than I have ever known it to be. The bait used was the minnow, and it trolled very slowly. Just enough to keep the bait off the bottom, the catches ranging between twenty and forty a day.

E. H.

BIG BROOK-TROUT.—The Thunder Bay *Sentinel* (Lake Superior), says: The largest genuine speckled brook trout ever seen in this district was taken in the nets of the Lake Superior Fish Company near Amethyst Bay on Tuesday last—three fish weighed 15 lbs., the largest one weighing 6½ lbs.

ST. CLAIR FLATS.—Mich., Aug. 20th.—The following party are from Frankfort, Ky.: have fished here three days, and caught over two hundred genuine black bass. They will stay until the first of September. This party has the reputation of being the best fishermen in Kentucky: Gen. J. W. Rodman and wife; J. W. Rodman, Jr., and wife; H. W. Rodman; Judge Hines.

NEW HAMPSHIRE—Lake Village, Aug. 16th.—Black bass fishing in the Wakawan Lake, at Meredith, is very fine. On Wednesday I took twenty beauties from the water, nine of them weighing two pounds each. I met a friend who had taken one that afternoon for a solid four pounds—one of the largest of the season. (10.)

A NEW MAINE SOCIETY.—Monson, Maine, Aug., 9th.—We are about organizing an Association here for protection and stocking our ponds and protection of game. Fishing in this vicinity was never better. Ship Pond is furnishing a large amount of speckled trout and landlocked salmon.

E. R. H.

NEW YORK—Fishkill Landing, Aug. 26th.—The drought has made sad work with the streams that the Wicapee Association stocked with trout last spring, all the water remaining in them being in the swamps, and that is warm and impure, so the prospects for a good trout fishing next season are anything but encouraging. (6.)

FLY-FISHING FOR BASS.—On page 69, last issue, line 21 from the bottom, for "a stiff rod is more pliable," etc., read "a stiff rod is more friable," etc.—a typographical error.

Game Bag and Gun

—Address all communications to "Forest and Stream Publishing Company, New York."

GAME IN SEASON IN AUGUST.*

Moose, *Alce americana*.
Caribou, *Rangifer caribou*.
Elk or wapiti, *Cervus canadensis*.
Red or Virginia deer, *C. virginianus*.
Squirrel—red, black and gray.
Hares—brown and gray.
Reed or rice bird, *Dolichopus*.
Wild turkey, *Meleagris gallopavo*.
Pinnated grouse or prairie chickens, *Cathartes*.
Ruffed grouse or pheasant, *Bonasa umbellus*.
Quail or partridge, *Ortyx virginianus*.
Woodcock, *Philohela minor*.
Black-bellied plover, ox-eye, *Squatarola helvetica*.
Long-billed curlew, *Numenius longirostris*.
Turnstone, or calico-back, *Streptopelia interpres*.
Red-breasted snipe, dowitcher, *Tringa marbled*, godwit, or marbled godwit, *Limosa fedoa*.
Willet, *Totanus semipalmatus*.
Yellow-shanks, *Totanus flavipes*.
*This enumeration is general, and is in conflict with many of the State laws.

"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, surf-bird, phalaropes, avocets, etc., coming under the group *Limicola*, or shore birds. Many States permit prairie fowl (pinnated grouse) shooting after Aug. 15th.

CHICKEN SHOOTING IN AUGUST.

August, 1880.

HERE in Northern Illinois we have had no rain for over a month. Everything is dry and the weather since Aug. 15th has been extremely warm, so that neither man nor dog could stand more than one or two hours' hunting in the early morning and late evening. My favorite resort is a two hours' ride from Chicago, where I drop down at a farm house the night before I wish to shoot. It is five miles from the near-by railway station, with good shooting in any direction. "I am satisfied I go a less distance and fare better than those who go further and perhaps fare worse. The multitude fly to the far off prairies of Nebraska, Minnesota and Iowa, leaving little oceans of cream within one-hundred miles of Chicago that are seldom skimmed. In this refuge I have bagged forty-eight grouse with a muzzle-loader in a day's shooting, and have never failed to get twenty-five to two guns on the first day's shoot.

Last Monday found me as soon as it was light enough to shoot, trapping a stubble over which, with one exception, I had made an annual parade for the last ten years. My dog was a new acquisition, wonderfully up in the tactics, but lacking the experience of dogs I had hunted over that field in other seasons. I expected surprises in the development of my dog; and what sportsman does not know when he has a good thing in a dog, even though he has not killed a thousand birds over him? My Knight proved his mettle before he had been afield twenty minutes, and I, the satisfaction of "flashing my first shot" in a pair of fine young birds, while the third shot failed to flash and poor Knight seemed to debate in his mind (brain I should say), whether he should not try and catch that single young chick as long as I missed it. A gentle "charge, sir," steadied his nerve, and retrieving the pair we moved on. Most of the morning was taken up trying to cross patent barbed wire fences. Did you ever try to get over, through, under, or on top of one? Like the drouth they prevail in this country, and unless you carry a jumping pole do not attempt to cross one. Farmers need no longer stop "No shooting on these here grounds." Just let them build a five strand barbed wire fence, and sportsmen will cross it just as quick as dogs will eat live porcupine.

Knight proved my judgement in his breeding and training to be correct, and he had but one surprise in store for me. One or two in a covey had been flushed when a young chick flushed from under Knight's nose and dropped on the stubble in plain sight, not ten yards from the dog. The chick stepped jauntily along with quick jerks of its tail until Knight became disgusted, not knowing I would not shoot the bird sitting. He made a beautiful dash at it and succeeded in flushing it, and giving it a good start. Visions of check cord, a charge of fine shot, and the whip flashed through my mind, but it was too hot. Giving Knight credit for more sagacity than I supposed he had, as he knew I would not shoot until the bird rose, I sat down and waited his soon coming. He soon came, and I took him on his face that told plainly he had not caught a chick. I had a friendly talk with him, took him to where he started, made him charge, and gave him an energetic lecture on the foolishness of chasing; that he would eventually get overtaken with a charge of shot or run into a spiked collar if he ever did it again. During the morning we found four fine coveys, none of the birds full-grown and a few old birds from which I bagged thirteen, at no time being over a mile and a half from the house. The same evening I bagged nine, making twenty-two for the day, and my best day. After the second or third day I became wearied and exhausted with the heat when I returned, determined that the right time to shoot game in this latitude is in the fall, not earlier than Sept. 15th, when birds are strong of wing and full in size, and when some pleasure may be had in a day's sport when you can breathe a bracing atmosphere as you walk the crackling stubble and when the game you bag will not be unfit for food before it can be brought to the table. Hoping to be able to chronicle the graduation of Knight from his October fields with high degree, I am,

TOM TRAMP.

FIELD SPORTS IN MINNESOTA.

SACK CENTRE, August, 1880.

ONE of the most enjoyable pastimes a man can engage in, is in the field with dog and gun. This section of country is well known to a great number of sportsmen who pay yearly visits here in order to find the much sought pinnated grouse (*Totanus capido*) and enjoy a week's sport in the field. The law ful time for killing this noble bird is Aug. 15th to Oct. 1st, too long a time by half, for they are becoming more scarce every year.

Yesterday, in company with a friend, we took our

LONG BRANCH GUN CLUB.—On Saturday, Aug. 23th, the members of the Long Branch Gun Club shot at Deal, N. J., for a silver cup presented by the West End Hotel, at Long Branch. The cup was won after some fine shooting by Mr. Polhemus, at 30 yards who shot off a tie with Messrs. W. G. Murphy and Greene, Mr.

nd Greene,)

* Of English Dogges, [the] diuersities, the names, [the] nature and the properties. A Short Treatise written in laine [by] Iohnannes de Witt, [of late memo]rie, Doctour of Physicke [in the] Universities [of] Cambridge. And newly drawne into English by Abraham Fleming Student, [*Natura etiam in brutis vna*] *et cetera*. [Scene and allowed.] * Imprinted at London [by] Richard Iohnes, and are to be [solde] ouer against S. Sepulchres Church without [Newgate] 1576.

Rule 7. Pointing hares, "stink birds," larks, turtles, bitterns or any bird generally considered game, shall not be deemed false points. A dog making a false point, and discovering it to be such, without any encouragement from his handler, shall not be penalized.

INSTRUCTIONS TO JUDGES.

Pointing.—The judges will allow only those dogs the maximum that point all the birds possible for them to point under existing circumstances; a dog to earn the maximum number of points under this head must display a first-class nose and exhibit great judgment in finding and pointing his birds, and make no flushes that a dog with the above qualities would avoid in ordinary hunting. The dogs are to be hunted in all respects as in an ordinary day's shooting, in a sportsman-like manner. Inexcusable or wilful flushes will detract from a dog's score under this head, but the character of the flush must be always taken into account in estimating the penalty, if any. The judges must not ask the handlers if their dogs are pointing, but must decide for themselves. They shall always consider the nature of the ground, the wind and the birds, and not penalize a dog for flushing a bird it would be impossible to point. The penalty for flushes to be graded by the character of the offense. The judges shall not require the handlers to work their dogs down wind.

Pace.—The dog that maintains the fastest gait throughout the trial, except when in cover or on game, to receive the full number of points, all others to be graded by him.

Backing.—The maximum only allowed such dogs as stand or drop instantly at sight of another dog pointing. But no dog shall be expected to back unless the dog pointing stands and is motionless. A dog shall not be said to refuse to back unless he sees the dog pointing. To get credit for a back, the dog must stop at least ten yards (when practicable) in front of the handler. Should a dog refuse to back, and, instead, go ahead, or alongside of the pointing dog, and steal a point, the same shall not again be allowed to come nearer his pointing competitor than twenty yards, and be kept charged while the birds are being flushed over the pointing dog.

Style.—The judges shall consider the dog's grace in ranging and drawing, and attitudes in pointing and backing.

Stanchness.—The maximum allowed such dogs only as do not advance from their point when they are on game until ordered on.

Ranging and Quartering.—The maximum only allowed the dogs that maintain the most killing range throughout, viz.: wide or close, as the necessity of the case may require, and who cover their ground systematically excepting where the nature of the ground renders such work impracticable.

Obedience and Disposition.—The maximum only allowed to a dog that works promptly to the gun without noise or severity, and is obedient, prompt, cheerful and easily handled.

Retrieving.—To receive the maximum under this head, a dog shall go promptly and cheerfully for the bird, find the same, and deliver it to the handler without mouthing or mutilation. The handler shall not assist the dog in finding the dead bird by leading the same toward it, except in those circumstances such that the dog cannot reasonably be expected to find the bird, or not without much loss of time.

False Pointing.—The judges shall give a dog ample opportunity to discover whether or not he is on a true point, and the penalty shall range from 1 to 7 for his acts throughout the heat.

Breaking in is when a dog through imperfect breaking or from excitement, leaves his position when the birds rise, whether the gun is fired or not, and starts to break shot or chase, but stops within a few feet from the point from which he started, of his accord or by command.

Breaking shot is when a dog runs in when a shot is fired, with the intention of getting the bird.

Chasing is when a dog follows the birds, either when the gun is fired or not, to an extent to be beyond the control of the handler for the time being.

Puppy Stakes.—Rule : Dogs over eighteen months old shall not be eligible for the Puppy Stakes. Rule as above.

Brace Stakes.—The rules governing the Brace Stakes shall be the same as those used in the All-Aged Stakes, with the following exceptions : The maximum for ranging and quartering shall be 20 instead of 10, and the total one hundred and ten instead of one hundred. The brace to earn the maximum for quartering must cross each other systematically, and work independent of each other, or one dog must quarter the ground on one side of the other while the other dog quarters the opposite side, the dogs meeting at or near the center. Each brace will be run separately, instead of running in heats, and be judged by the scale of points as laid down and explained.

Nursery Stakes.—Rule : Dogs over twelve months old shall not be eligible for Nursery Stakes. There will be no points allowed for retrieving in this stake. Rules otherwise as above.

THE FIELD TRIAL RULES DISCUSSED.

NEW YORK, Aug. 30th.

Editor Forest and Stream :—

The rules which are to govern N. A. K. C. Field Trials, which have appeared in the FOREST AND STREAM, and those of the Eastern Field Trial Club, just issued, call for some notice and even criticism on the part of those who, whether as competitors in the trials, or merely as practical sportsmen and owners or breeders of dogs, are interested in the improvement of the field dogs of America. No one, in fact, can overstate the interest, such side contests of the field trials to be run next fall without feeling a deep interest in their execution; for it is acknowledged by all practical shooting men, that such trials contribute more to raise the standard of excellence of our setters and pointers than anything else can. Bench shows are, of course, very well in their way, and a prize winner is a beautiful object to the eye, but many a dog that has taken a blue ribbon would not be worth, to the sportsman, the charge of powder and lead that would blow out his brains, while some animal at which the judges disdain to cast a second glance, may do his work in the field, day after day, in a style that would satisfy the most exacting lover of the gun. For myself, while I yield to

no one in my admiration of a beautiful animal, as near the type of his kind as may be, I would rather do my shooting over a dog, if it were real and broken, than a good one, than be obliged to use some of the dogs that have stood first in the ring. And this, I think, is the feeling of many, if not most, of my brother sportsmen in this country. They want the dog which will find the most birds, point them the most stanchly, retrieve them with most certainty, and be able to do this at least three or four days in the week—throughout the season, if necessary. If what I have assumed is true, the very general interest in field trials is explained, and I think that I hazard nothing in predicting that the accounts of those to be run in the autumn will be more eagerly read by shooting men than any previous canine competitions that have been held in the United States. The importance of having the rules to govern the trials, and the directions to judges clear and concise, is self-evident. They should be brief, simple and couched in language that can be by no possibility be misinterpreted or twisted from its legitimate meaning.

In contests of this kind there is too often manifested a disposition to find fault with the rules, the judges and even to wrangle; but by making the rules unmistakably clear, and by choosing judges men of undoubted reputation, there is no reason why the coming trials should not pass off without any of those unfortunate misunderstandings, to use no harsher term, which have disgraced such meetings of sportsmen in the past. While not professing any very profound knowledge on the subject of dog breaking, I am accustomed to work my own dogs in the style that suits me, and I therefore venture to offer my views on the rules for field trials, as laid down by the two clubs already mentioned. It seems to me, in the first place, that several of the rules in the circulars referred to are lamentably obscure, and some of them, to my mind at least, convey no meaning whatever. On the whole, the rules of the Eastern Field Trials Club are the most intelligible; but even these might be improved upon. The last clause of Rule 3, in the N. A. K. C. circular, is extremely indefinite and blind, though its purpose may be made out by a careful reading. Rule 3, of the E. F. T. Club is perfectly clear. Rule 4 is in both cases unmistakable in its meaning and needs no comment, but I cannot help thinking that the scale of points by which the dogs are to be judged is in some respects not what it should be. The highest credit that any dog can get for "pointing," is 35; "pointing" as here defined, including nose and judgment. Style has a separate mark, and so has stanchness, so that neither of these is taken into account. Yet a point without stanchness is scarcely worth speaking of, and surely style is as important on the point as it is when the animal is ranging. The term "pointing," it seems to me, is unsatisfactory, and I shall endeavor below to suggest a more appropriate one. Pace, in the Rules of the N. A. K. C., is rated at 20, and in those of the E. F. T. C., at 15. The latter, I think, is the proper figure. Nothing is more wearying and annoying than to follow a potter, and "pace" is certainly one of the most important attributes of a good field dog. Backing is rated at 7 in one set of rules, and 8 in the other; too high in both. To a well bred dog it is as natural to back as it is to point, and I have seen, as no doubt have many others, young puppies, that had never seen a bird, back as stanchly as the best broken dog. The puppy has inherited his disposition to back from his well broken ancestors, and, besides this, his attention is fixed and his curiosity aroused by the stopping of his companion and the rigid attitude which the latter has assumed. The breaker must cultivate and fosters this inherited tendency to stop at the sight of a pointing companion; and to teach a dog to back—a well bred dog, it be understood—is one of the easiest of the handler's tasks. For style the marks are 6 and 7. As I have already indicated, style in pointing is quite as important as style in ranging, and if, as seems probable, the style referred to is only style in ranging, it should be explicitly stated that this is the case. I am disposed to think that if the style referred to in ranging are included, the marks assigned to it in the rules are not far from the proper number. Stanchness, 6 and 8, I know of but one attribute of a field dog that is more important than stanchness. No matter how many good qualities your dog may have, if he is not stanch he is not worth his salt. Many a man hunts over a dog that does not pretend to mind, that goes about hunting in his own way, has no style, potters, very likely, perhaps even does not retrieve, but when he wins, he stays there until the gun comes up. He will never flush a bird, but his point unless dragged away by main strength. The owner of such a dog thinks he has a treasure—and he is right in so thinking. He may lose some birds because his dog does not retrieve, but not nearly so many as he would if the animal was stanch. Stanchness I consider of the very highest importance, and I would make it much higher than is here done. In the N. A. K. C. Rules, ranging is marked 6, and quartering 6, and in the E. F. T. C. Rules, ranging and quartering together 10. These marks are not far from the proper percentage, though in view of the great importance of other qualifications, they are perhaps somewhat too high. Obedience and disposition are rated at 4 and 7, the latter being about the proper figure. Retrieving, which is of great importance, is rightly rated at 10. Rule 6 is admirably worded and will no doubt be strictly enforced. With regard to the "points of demerit," I have only one criticism to make. Chasing is so serious a fault that it should disqualify the dog the first, not the second time that it occurs. An animal that is not under sufficient command to come in, or drop, when ordered, should not be entered in the trials. There should be also, I think, a penalty of not less than 6 for wilful flushing. Simple flushing from excitement or heedlessness should be punished by loss of marks in pointing." In the instructions to judges there is nothing which calls for anything but praise, until we come to the last paragraph, where we find the clause, "The dog must stop at least ten yards (when practicable) in front of the handler." This rule is intended, we presume, to prevent the person working the animal from ordering the latter to stand, but this seems unnecessary, for the presence of the judges would restrain the handler from speaking to his dog, and if their presence does not, the distance of thirty feet would not prevent his doing so by any other command. There is here a looseness of phraseology which, I think, offers an opportunity for a quibble.

Stanchness is not clear. The dog may come to a point

on birds, but if they run it is clearly his business to break his point and follow them, whether he is ordered on or not. Ranging and quartering in the E. F. T. instructions are clear enough, but the conditions are too general. In the N. A. K. C. instructions, however, I am enabled to understand what the definition of quartering intends to convey. What does working "at right angle to the bander" mean? Does it mean at right angle to the course the handler is pursuing? I presume so. If it does not mean that it means nothing as far as I can discover. In practice a dog scarcely ever works at right angle to the course of the shooter, but usually at an angle of about 45° with it. His course is that of a smart sailing vessel tack against a head wind.

And now a word about the scale of points for judging, and I am done. I have already stated that, in my opinion, the marks for the different attributes of a good dog are not divided as they should be in view of the relative importance of the various acts to be performed. Nose is certainly the most important qualification that a dog can have. You can, by care and patience, teach him almost anything, but you can never teach him to have a good nose. The nose must be born with that. Without nose he is, of course, utterly valueless for hunting purposes, and with nose he can, with sufficient training, be made of some use. Nose and judgment, or intelligence, usually go together, though judgment is, after all, only another term for the experience which can only be acquired in the field. This combination of qualities corresponds more or less closely with what is called "pointing," but it seems to me that finding would be a more fitting term, in which to designate it. Finding, then, should rank the highest in the scale of points, and should not be marked less than 30. After finding comes stanchness, which, as I have already tried to show, should have a high mark, say 18. Pace comes next, and this I would rate at 15. Retrieving is only less important than pace, and saves the weary shooter many steps and many birds. I would place it at 10. This is a point that requires to be carefully watched by the judges, for although most dogs retrieve, the percentage of those who do it properly is, I fear, very small. Style is a refinement, a luxury rather than a necessity, and its presence in a dog adds so much to the pleasure of the shooter that I would place it next in order with 8 marks. Then should follow ranging and quartering 7, and obedience and disposition 7, and, last of all, backing 5.

In the points of demerit, false pointing and breaking in are venial offenses; breaking shot is more serious, and should receive from 5 to 10 marks, according to the character of the offense, while real *bona fide* chasing should receive 100 and be out of the contest at once. Wilful flushing, as above remarked, I would punish with 6 marks for each offense.

This letter has far exceeded the bounds I had marked out for it, and yet I have left much unsaid. In concluding I would say that both the N. A. K. C. and the E. F. T. C. are to be congratulated on the energy that they have shown in the matter of these trials, as well as on the judgment that they have shown in the selection of the judges so far as announced. I wish that they would amend their rules so that there may be no opening for complaints from dissatisfied competitors; for with clear rules and good judges, each man who enters his dogs will know precisely what he has to expect, and must abide by the decision rendered.

COUTLES.

EASTERN FIELD TRIALS.—The following is the programme of the trials to be run by the Eastern Field Trial Club next fall :—The Second Annual Meeting will be held under the auspices of the Eastern Field Trials Club, at Robin's Island, Peconic Bay, Long Island, N. Y., on November 24th and 30th and December 1st, 2d, 3d and 4th. Open to the world. All-aged stakes, open to all setters and pointers. Limited to 50 entries. First prize, \$200; second, \$100; third, \$50; fourth, \$25. Entrance fee, \$25. Puppy Stakes, open to all pointers and setters under 18 months of age. Limited to 25 entries. First prize, \$100; second, \$50; third, \$25; fourth, \$15. Entrance fee, \$15. Forfeit, \$10. Nursery Stakes, open to all setters and pointers under 12 months of age. Limited to 15 entries. First prize, \$80; second \$40; third \$20. Entrance fee \$10. Forfeit, \$7.50. Brace Stakes, Open to all setters or pointers, five braces to run or prizes to be scaled. First prize, \$250; second, \$125; third, \$50. Entrance fee, \$25. Forfeit, \$15. Club Stakes, open to members of the club only; dogs to be owned, bred and hunted by the member making the entry. Prize, a hundred dollar piece of plate to be selected by the winner. Entrance 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace stakes, and entries close on November 18th. Entries will be received for the open stakes up to midday of November 27th, at the office of the club, and on the grounds up to the evening before the trial. Entries must be accompanied by the forfeit money in full cases.

—Mr. Charles Lincoln, Superintendent of the St. Louis dog show, has sent us a number of premium lists and entry blanks, which can be had by calling at this office.

KENNEL NOTES.

NAMES CLAIMED.—Bravo.—Mr. George Norbury Appold, of Baltimore, Md., claims the name of Bravo for pointer dog puppy, out of Kate, by Bragg. Lark.—Mr. H. G. Jerome, of Gale's Ferry, Conn., claims the name of Lark for his English beagle bitch puppy, purchased by him from Mr. N. Elmore. Max.—Mr. A. A. Atkins, of Turner's Falls, Mass., claims the name of Max for his English beagle puppy, purchased by him from Mr. N. Elmore. Bonaparte and Lianen.—Mr. Thomas M. Smith, of Jersey City, claims the names of Bonaparte and Lianen for his brace of red and white setter puppy, won July 18th, 1880, out of Nell II. by T. O'More; he by Tony O'More. Burges' (after Stoddard's Friend; Nell II., Goldsmith's Plunkett-Nell. Nellie.—Mr. Thomas M. Smith, of Jersey City, claims the name of Nellie for red and white bitch puppy, out of Nell II. by T. O'More. Whist.—Mr. Charles B. Barnes, of Boston, Mass., claims the name of Whist for his lemon and white dog puppy, whelped July 9th, out of Sibyl, by Rufus H., owned by Mr. Henry Smith, of Boston. Speed.—Mr. N. Elmore claims the name of Speed for black and tan foxhound bitch puppy, presented to him by Mr. George Fournell, of Christiansburg, Pa. Flora Bell.—Mr. H. B. Stoll, of Corning, N. Y., claims the name of Flora Bell for his red and white

setter bitch, whelped July 20th, and presented to him by Mr. Ed. Peterson, of Chepco, N. Y., out of his bitch by Sport. "Alec," Mr. George Lack, of Chepco, N. Y., claims the name of Alec for his red and white setter dog puppy, out of Mr. C. H. Hauptmann's Jessie by Mr. G. S. Sedwick's Bug. "Mina"—Mr. N. Elmer claims the name of Metta for the white, black and tan English foxhound puppy, presented to him by Mr. McKoon, of Franklin, N. Y. "Thor"—Miss Coppel, of Bethlehem, Pa., claims the name of Thor for her smooth-coated St. Bernard puppy, whelped June 7th, 1889, out of Mr. J. S. Schuyler's Josephine by his Guy. "Firt"—Mr. William S. Thurston, of Huntington, L. I., claims the name of Firt for his lemon and white pointer bitch, whelped March 15th, 1889, out of Mr. R. T. Green's Girl, Maryland-Tell by Mr. W. F. Steel's Glenmark, Irish-Romp.

NAME CHANGED.—Mrs. Mr. George Northrup Appold wishes to change the name of his Irish setter bitch Bessie (formerly Red Betsy), out of Jessie by Boston, and recently purchased from Mr. J. J. Jennelle, Du Quoin, Ill., to Nera.

WHELPS.—Rose, Mr. C. S. Elliott's Rose whelped two puppies by Blossom. Mina—New York, Aug. 31st. *Editor Forest and Stream.*—My kennelman writes me of the following whelps by my champion Mina by champion Dash III.: "Last night (Aug. 29th) Mina whelped seven puppies, four dogs and three bitches, three of which, the white, orange and white, and white, the first white will probably be marked with orange, the brown is very handsomely marked with tan around the margin; two are marked just like Mina, and one has black around each eye and white ears, a very singular marking. They are all strong and healthy and Mina doing well." WALTER H. BECKE.

PAID.—*Montpelier-Belle.*—Mr. G. D. Macdonough's (Lachin Kennel) black cocker bitch Madcap (second, Montreal, 1889) to Henderson's black (black—second, Toronto, 1879) at Toronto, Aug. 20th. *Fora-Wilbur.*—Mr. G. D. Macdonough's (Lachin Kennel) liver colored cocker bitch Cora (first, Montreal, 1879; New York, 1880) to the Hornell Cocker Kennel Club's Wildair (black), at Hornellsville, N. Y., Aug. 23d. *Moll-Blossom.*—Blossom, Mr. T. H. Snullman's Gordon setter bitch —, to Dr. Niven's Blossom, Grace-Cor—Mr. E. F. Merceholl's champion bitch Grace to Mr. P. H. Morris-Cor, at Aug. 24th, 1889. *Moll-Blossom.*—Mr. Edwin Tinsley's (Hornell, Ont.) Gordon setter bitch Mollie, Grace-Fanny to Dr. Niven's Blossom, Aug. 24th, 1889.

PRESENTATION.—*Melvin.* Mr. George Van Wagoner, of this city, has presented to Mr. R. J. Morgan the pointer bitch Maxine, out of Dutchess by Rush.

The Rifle.

—Address all communications to "Forest and Stream Publishing Company, New York."

ONTARIO RIFLE ASSOCIATION.

TORONTO, Ont.—On the 23d ult. the annual matches of the Ontario Rifle Association commenced on the Garrison Common. The day, though bright, was not too much so, and there was a fairly steady breeze blowing from the southeast. The arrangements which had been made by the Executive Committee were as nearly perfect as possible, and all concerned deserve great credit for the manner in which the first day's shooting was carried out. The number of entries was not quite as large as last year, but the shooting was better, and the ranges had been laid out, comprising F. A. C. ranges, numbered from 1 by the Liko shore to 17, near the Exhibition Building. The first 17 targets were devoted to the Canada Company's match, and the remainder to the Macdonough for the first part of the day, and to the Affiliated in the afternoon.

The several matches shot and decided were as follows:—
Canada Company Match.—Restricted to the active militia of the Province of Ontario who have never won a prize at any provincial or Dominion association; 7 shots at 500 yards; cash prizes, \$30; Private Henderson, Twenty-fifth, 35; Capt. Hunter, Thirty-second, 35; tie won by Henderson. Lieut. Elliott, Seventh Fusiliers, 37; Private Morrison, Guards, 31; Private G. Glennie, Dufferin Rifles, 33; tie won by Glennie. Lieut. Colby, Thirtieth, 32; Gunner Kennedy, Napanee G. A., 30; Corp. Dunn, Thirtieth, 30; Adj. Corlie, Twenty-fifth, 30; Capt. Tann, Twelfth, 30.

The Macdonough Match.—Seven shots at 200 yards; any position; open to members; total cash prizes, \$50; Sgt. Armstrong, Guards, 31; Lieut. Moore, Twenty-fifth Battalion, 33; Private Schwarz, Thirtieth Battalion, 32; Private W. Jack, Tenth Royals, 31; Lieut. G. A. Wilson, Second Military District, 32; Private Kilpatrick, Twelfth Battalion, 32; Lieut. Col. Gibson, Thirtieth Battalion, 32; Sgt. T. Mitchell, Tenth Royals, 31; Major Wilson, Thirtieth Battalion, 31; Lieut. Adams, Thirtieth Battalion, 31; Private Marlett, Twentieth Battalion, 31; Private C. N. Mitchell, Tenth Royals, 31; Sgt. Panie, Thirtieth Battalion, 31; Lieut. Fox, Twentieth Battalion, 31; Sgt. Thompson, Q. O. R., 31.

Affiliated Match.—Open to members; ranges, 200 and 500 yards; 5 rounds at each range. Total prizes, \$30; Private Chilton, Corp., value \$50 and \$40; second prize, \$30; third prize, \$20; fourth prize, \$15; fifth prize, \$10. Individual prizes, \$25 each: Private Moore, Georgetown R. A., 47; Lieut. Col. Gibson, Thirtieth Battalion, 46; Major Bennett, Fifty-eighth Battalion, 46; Color Serg. Hancock, V. I. C., 46; Private Morris, Thirtieth Battalion, 46; Private C. N. Mitchell, Tenth Royals, 45; Private Moore, Thirtieth Battalion, 45; Lieut. Crowe, W. F. B., 45; Mr. J. L. Cox, Second Military District, 45; Private R. Johnson, Sixth Fusiliers, 45; Mr. Todd, Bruce R. A., 45.

Team prizes.—First prize, ladies' challenge cup, value \$150, presented by the ladies of Toronto, and \$40—Thirtieth Battalion, Hamilton, 29; second prize, \$40, Ottawa Rifle Club, 20; third prize, \$30, Sixth Fusiliers, Montreal, 26; fourth prize, \$20, St. Thomas Rifle Club, 24; fifth prize, \$10, Guelph Field Battery, 23.

The Gilmour Match.—Presented by the President; 7 rounds at 500 yards. Total cash prizes, \$300. Capt. White, Thirtieth, 31; Sgt. Allenby, Twenty-second, 31; Capt. Stachan, Forty-seventh, 31; Mr. John Steen, Q. O. R., 31; Major Wilson, Thirtieth, 31; Lieut. G. A. Wilson, Second Military District, 31; Sgt. T. Mitchell, Tenth Royals, 31; Mr. W. Smith, L. R. C., 31; Lieut. Adams, Thirtieth, 31; Staff Serg. Lewis, Q. O. R., 31; Private Stewart, Twentieth, 31; Wheeler Ogg, W. F. B., 31; Private G. W. Pitt, Seventh Fusiliers, 31; Private Moore, Twentieth, 31; Staff Serg. Snares, Thirtieth, 31.

On Tuesday afternoon the Gordon match was finished in bad weather, and consequently, with one or two exceptions, the shooting was not good. The following is the score: 7 rounds at 500 yards; open to members; cash prize \$250; Major Henderson, Forty-fifth, 31; Mr. P. Oakley, Second M. D., 29; Sgt. P. H. Bailey,

Forty-seventh, 29; Staff Serg. Walker, Q. O. R., 28; Lieut. Snart, Dufferin Rifles, 28; Gunner Tevelan, Cobourg R. A., 23; Sgt. Mitchell, Thirtieth, 23; Capt. Moore, Thirtieth, 23.

During the night it rained heavily, and a heavy gale blew from the eastward. Those who had camped out were not much inconvenienced, as the tents were well sheltered. At 9 o'clock the firing commenced, the matches for the day being the Merchants' cup, for battalion teams, and the Brassey cup, for company teams, besides the Extra Series match for special prizes. Great interest was attached to the cup matches from the circumstance that if the Thirtieth won the Merchants' it would become their absolute property, they having secured it the two previous years, while the same would happen if the Guards won the Brassey. The scores of the day stand:—

Merchants—Brassey—200, 500 and 600 yards; 7 shots each range. Battalion Team Prizes—First prize, Merchants' Challenge Trophy, value \$250, and \$75 each, Thirtieth Battalion, 63; second prize, cash \$20, The Guards, 61; third prize, cash \$10, Queen's Own, 60; fourth prize, cash \$5, 20th Battalion, 58; fifth prize, cash \$3, Twenty-fifth Battalion, 56.

Brassey—Company Teams—First prize, Brassey cup, value \$125, and \$50 each, No. 2 Company, Thirtieth Battalion, 40; second prize, cash \$30, No. 1 Company, Guards, 26; third prize, cash \$20, No. 1 Company, Thirtieth, 31; fourth prize, cash \$15, No. 2 Company, Tenth Royals, 54; fifth prize, cash \$10, No. 3 Company, Thirtieth, 52.

Individual Prizes—Lieut. Mitchell, Thirtieth, 63; Sgt. D. Mitchell, Thirtieth, 62; Sgt. Armstrong, Guards, 89; Corp. Brady, Q. O. R., 89; Private Anderson, Guards, 89; Private Johnston, Sixth Fusiliers, 85; Sgt. Panie, Thirtieth, 88; Lieut. Col. Gibson, Thirtieth Battalion, 87; Wheeler Ogg, W. F. B., 89; Lieut. Crowe, W. F. B., 81; Major Wilson, Staff Serg. Speers, Twentieth, 85; Major Bennett, Fifty-sixth, 85.

The fourth day, though fine, was by no means a good shooting day, for when the gun fired at 9 o'clock it was blowing half a gale from the southeast, which did not moderate, but rather increased as the day grew older. The first competition was that for the Gzowski cup and \$60, to be competed for by the four military districts, 6 men each, and in addition cash individual prizes.

For the aggregate prizes, Lieut. Crowe, of the Wellington Field Battery, who has been shooting steadily throughout, came to the front and swept the board, winning the Governor-General's silver medal, the Ekington cup and the Dominion Rifle Association medal.

The score of the Gzowski stand:—
Seven rounds at 500 and 600 yards; team prize, silver cup, presented by Lieut. Colonel Gzowski, and \$90; to be competed for by twelve members of the district. Cash prizes, \$210.

Team Prizes.—Fourth Military District, 58; First Military District, 52. Individual—Lieut. Crowe, W. F. B., 62; Sgt. Armstrong, Guards, 60; Private W. H. Pencock, Q. O. R., 59; Lieut. W. Mitchell, Thirtieth, 57; Staff Serg. Walker, Q. O. R., 55; Sgt. W. Mitchell, Thirtieth Battalion, 55; Private G. Bell, Twelfth, 55.

The Sir Peter Tait Cup.—Prize, silver cup, value \$250, presented by Sir Peter Tait, of London, Eng., to the active militia of Canada in commemoration of the visit of Lieut. Col. Skinner and the Ontario team to Wimbledon, 1871, and \$20 added by the Association. Total cash, \$260. First prize, Thirtieth Battalion, 1546; second, the Guards, 1438.

The Skirmish Match.—Ranges from 200 to 400 yards. Number of rounds, 10; 50 yards, 5 rounds; 100 yards, 5 rounds; 200 yards, 5 rounds; 300 yards, 5 rounds; 400 yards, 5 rounds. To be competed for by 6 officers, non-commissioned officers, or men from any battalion, brigade or regiment of artillery, squadron of cavalry, or field battery of the active militia in skirmishing order. First prize, \$50; second prize, \$40; third prize, \$30; fourth prize, \$20; fifth prize, \$10. Five prizes. Total cash, \$150. First, Queen's Own Rifles, 156; second, Thirtieth Battalion, 172; third, Tenth Royals, 167; fourth, Twentieth Battalion, 160; fifth, Thirtieth Battalion, 159. On the fifth day of the meeting, the small bore matches opened at 800, 900 and 1,000 yards.

RANGE AND GALLERY.

CAMPERS, N. J.—Gen. Grubb and the officers of the Stockton Rifle Association are doing an excellent line of work. For September the following programme of matches has been issued:—

Sept. 2d, Mid Range Off Hand Match.—All comers, 500 yards, off hand, any rifle, 10 rounds, allowance to military rifles used as 4 points, reduties permitted.

Sept. 4th, 11th and 18th, Sharps Match for Sharps Military Rifles.—Second series of 15 competitions for 15 Sharps military rifles, all comers, 20 yards, off hand, 10 rounds, weapon Sharps military rifle.

Sept. 7th and 21st, the Alford Match.—Six competitions to take place during the season. Prize, a breech-loading, double barrel shot gun, English walnut stock, Damascus steel barrels, engraved; value \$80; all comers, 200 yards, off hand, any rifle, 10 rounds, reduties allowed. The prize to be awarded to the highest aggregate of six scores whenever made by any one competitor.

Sept. 9th, Everybody's Match.—All comers, 300 yards, off hand, any rifle, 15 shots, allowance to military rifles 1 point.

Sept. 11th, The Off Hand Match.—Three competitions, open to everybody; any rifle, 100, 200 and 300 yards, 5 shots at each, off hand, reduties allowed, but only the highest score to count. Competitors shooting with military rifles as such will receive an allowance of 1 point at each distance (total 3 points). Prize, to the competitor making the highest aggregate score of two competitions participated in out of the three, a short range rifle, American walnut checked stock and fore-arm, pistol grip, hard rubber butt plate, short vernier grip sight and wind gauge, weight 90 pounds, value \$40.

Sept. 13th, Mid Range Match.—Prize, a new model 32 caliber military rifle, all comers, 500 yards, any position, any rifle, 10 rounds military rifles allowed 4 points, reduties permitted.

Sept. 23d, Stockton Badge Match.—Prize, a massive gold badge, presented by Hon. John P. Stockton; open to members of the National Guard of the State of New Jersey, 200 yards, standing, 10 shots, any rifle, to be shot for annually. Won in 1879 by Col. D. B. Murphy.

Sept. 24, Champion Marksman's Badge of 1880.—Open to all members of the Second Brigade National Guards of New Jersey, 200 and 500 yards, 5 shots at each, weapon the military rifle in use by the State, position standing at 200, any with head toward the target at 500 yards; prize, a fac-simile in gold of the marksman's badge issued by the State of New Jersey. This badge will be awarded to the competitor who, at the close of the season, shall have won it the greatest number of times.

On Sept. 25th the annual prize meeting will open and continue for three days. The matches are:—

Sept. 25th, Everybody's Match.—Ten prizes, all comers, 200 yards, any rifle, military rifles allowed 2 points when used as such, 7 shots, off hand, reduties permitted.

Sept. 25th, 21th and 30th, Ballard Match.—Prize, a Ballard mid range rifle, value \$50; three competitions, one on each day, all comers, 10 shots, 200 yards, off hand, any rifle, military rifles allowed 2 points when used as such. The prizes as above will be awarded to the maker of the highest aggregate of three scores in the three competitions.

Sept. 28th and 29th, Hunter's Match.—For a model 1575 Winchester repeating rifle, two competitions, all comers, 500 yards, position any, any rifle, 5 shots, allowance to military rifles 2 points when used as such. The prize will be awarded to the maker of the highest aggregate score in the two competitions.

Sept. 29th, Short Range Match.—Prize, a Sharps military rifle and a Winchester repeating rifle, all comers, 200 yards, off hand, 5 shots, any rifle, military rifles allowed 2 points when used as such.

Sept. 30th, Dupont Powder Match.—For 25 pound canisters Dupont's rifle powder, presented by E. J. Dupont de Nemours & Co., Wilmington, Del., all comers, 500 yards, 10 shots, position any, any rifle, allowance to military rifles 4 points when used as such; first prize 5 canisters of powder, second prize 7 canisters of powder, third prize 5 canisters of powder, fourth prize 3 canisters of powder.

Sept. 30th, Military Mid Range Match.—All comers, military rifle, 500 yards, position any with head toward target, 10 shots, 5 shots, a short and mid range rifle, 40 caliber, 30 inch barrel, pistol grip stock, combination yoke and open rear sight, beech front sight, using straight shell cartridges 2 1/2 in., value \$32.

ELIZABETH, N. J., Aug. 24th.—Besides Drinton, the range of the N. J. State Rifle Association, the Singer Rifle Club, of Elizabeth, limited to the men employed in the Singer Sewing Machine Manufacturing Company, has a short range for its own convenience in the neighborhood of the factory.

VIRGINIA CITY, NEV., Aug. 12th.—At the Caladenia Pleno, in Treadway's Park, Carson City, 6 teams of 20 men each from the militia companies contested for the prizes which were, first, a gold watch and chain, value \$25; \$30 coin for second, and \$25 third prize. The first was won by the San Jose team of 20 men. This now makes seven successive times they have won first prize.

Following are the total scores of each team, ten shots per man, 200 yards: Sarsfields 82, Emmets 78, Carsons 78, Washingtons 71, Montgomerys 73, Tigers 68. Following is the individual score of the Sarsfields, which is said to be the highest ever made in any competition by 20 men from one company:—

Theo. Gallagher, Capt. of team	5	4	4	4	5	4	4	3	31
J. B. Chomel	5	4	4	4	4	4	4	4	39
Samuel Nutting	4	4	4	4	4	4	4	4	39
Samuel Dowling	4	5	4	4	4	4	4	4	41
John J. O'Brien	4	4	4	4	4	4	4	4	41
Jack O'Brien	4	5	4	4	4	4	4	4	41
James Morgan	5	4	4	4	4	4	4	4	43
Bernard Coyle	5	4	4	4	4	4	4	4	43
David Sheeran	4	4	4	4	4	4	4	4	40
P. J. O'Dea	4	5	4	4	4	4	4	4	40
Thomas Fallon	4	5	4	4	4	4	4	4	40
John Fallon	4	4	4	4	4	4	4	4	37
Hugh Gallagher	4	4	4	4	4	4	4	4	37
John Fallon	4	4	4	4	4	4	4	4	37
Owen Byrne	5	4	4	4	4	4	4	4	44
J. H. Harris	4	3	5	4	4	4	4	4	40
James McElroy	4	5	4	4	4	4	4	4	40
John Morgan	4	4	5	4	4	4	4	4	40
J. M. Bell	4	4	4	5	4	4	4	4	44
Fatsy Field	5	4	5	4	4	4	4	4	42

Total, 802.
On Sept. 5th another shoot takes place for \$100 coin and \$50 coin second prize.

OTTAWA, Aug. 24th.—The forthcoming meeting of the Dominion Rifle Association, to be held at Bidwell Rifle Range, Ottawa, commencing on 6th September next, promises to be the most important and successful competition that has yet taken place here, the programme of prizes being framed with a view of inducing a large attendance of marksmen from all parts of the Dominion, the aggregate cash prizes alone amounting to \$5,015, exclusive of prizes in kind, viz. London Merchants' Vase, the Macdonough cup, 3 Salsider rifles (Ingram's), N. R. A. medal and D. R. A. medal, besides 10 special badges to winners of the prizes, presented by His Excellency the Governor-General and Her Royal Highness the Princess Louise. The following is a synopsis of the prize list:—

All-comers' match, 60 prizes, \$400; Dominion of Canada match, 32 prizes, \$835; Battalion, 35 prizes, \$455; Macdonough Challenge cup, 41 prizes, \$585; Provincial match, vase, three rifles, and 43 prizes, \$441; Affiliated Association match, 48 prizes, \$130; Grand Aggregate, two medals and 20 prizes, \$300; Prizes presented by His Excellency the Governor-General and H. R. H. Princess Louise, badges and 3 prizes, \$500; Extra series No. 1, 17 prizes, \$190; Extra series No. 2, 17 prizes, \$180; Skirmishing match, 3 prizes, \$100; Small-bore match, 16 prizes, \$245; Wimbledon team for 1881, 20 prizes, \$750—total cash prizes, \$5,015.

Eleven new targets have been erected, and there will be 20 in operation, exclusive of the long range target of 1,000 yards. All are on the "Burnel" principle. The usual camping, telegraphic, postal, and other facilities will be provided.

The executive committee met this evening for the purpose of completing the details for the approaching meeting, appointing range officers, etc. The arrangements for marking, etc., will be made in such a way as to inspire the fullest confidence. Possibly some of the markers will be taken from "B" Battery, Kingston. The improvements being made at the range are about completed. It is expected that the Governor-General will be present, but no definite information has as yet been received. All the Provinces of the Dominion (including Manitoba and British Columbia) will be represented, and it is expected that there will be a team from the regular forces at Halifax under command of Captain Partridge; but as it is rumored that the regiment is to be removed to Bermuda, this is uncertain.

NEWARK, N. J.—The rally shooters here are laying out big plans for next winter's sport, and even now the cool recesses of the shooting tunnels are not entirely deserted. The Newark Rifle Association is composed of two delegates from each club, who are empowered to make rules governing matches in tournament, also to select the range for opening tournament and transact such business as may arise from time to time in different associations. The officers are, President, Wm. Gardner, of the Amateur; Secretary, William Van Dorn, of Barnard. The standing of the several clubs are as follows: Freinbushen Rifle Association, President, W. Fred Lynn; Secretary, A. C. Neumann. There is a 300 yard target at No. 18, Market street. The club shoot with a Ballard rifle, 22 caliber, on a 72 feet open range.

Amateur Rifle Association, President, Wm. Gardner; Secretary, J. H. Huegel. The range is situated at Montgomery's, Clinton street, and is a tunnel range. Shooting distance 74 feet, using a Ballard rifle, 22 caliber. The association numbers 41 men.

Essex Amateur Rifle Club, President, Fred Hebring; Secretary, J. H. Huegel. The range is situated at No. 340 Bank street, corner Lush street. This association has a membership of 35. Distance of range (tunnel) 75 feet. They use a Ballard rifle, 22 caliber.

Plymouth Rifle Association, President, Geo. M. Townsend; Secretary, Wm. Cox. At present the club shoot at Hill's tunnel range. No. 351 Broad street. Length of range 80 feet. A Ballard rifle, 22 caliber, is used. The membership is 32.

Washington Rifle Club, shoot on the tunnel range of John Haycock, No. 125 Market street. Distance 75 feet. They use a Ballard, 22 caliber. The membership is 25. President, Wm. Carr; Secretary, Wm. Bowers.

Barrett Rifle Association, President, D. Lamb; Secretary, M. B. Wood. Place of shooting, Hill's range. Rifle, Ballard 22 caliber. Newark Catholic Institute Amateur Rifle Club, 76 and 78 New street, President, E. Dennis; Secretary, T. J. Roche. Length of (tunnel) range 60 feet. Rifle, Ballard 22 caliber. Membership 20.

The Enos Runyon Rifle Club is composed of members of D. Company, First Regiment, and numbers 25 men. The association has no regular range. The officers are, President, F. M. Palminter; Secretary, Walter Anderson.

CREEDMOOR.—The New York Rifle Club announce a special match, to be shot at Creedmoor Sept. 23d, and styled Seabury's All Gunners' match. There will be \$200 in cash prizes. The conditions of the match are: Professionals declared—A professional rifleman as interpreted by Col. Sanford before the National Rifle Association. Two hundred yards; off hand. Shots, 7; no sighting shots; pool targets will be open for preliminary practice; any rifle. Military rifles, 1 point allowance; full scores cannot be beaten. Entrance fee, \$1 each for first and second entries; 50 cents each for every additional entry. Entries unlimited. Match commences at 9:30 A.M.; entries received up to 4:30 P.M.; match closes at 5 P.M. Prizes distributed on the day of the match. A shot may be challenged according to the N. R. A. rules; should the challenger be correct he will receive \$1 in addition to his deposit. Ties, equal scores, irrespective of the usual Creedmoor rules, to be shot off, 3 shots each, or any plan mutually agreed upon by those lying. To win either the first, second, third, fourth, fifth or sixth prize, the total of the two best scores of each competitor will be counted; single entries for all the rest. Any dispute which may arise not herein provided for, will be settled according to the rules of the N. R. A. by the officer in charge of the match. Only one prize can be won by each contestant. The first prize will be \$50 cash, the second \$30, the third \$25, and so on down. All riflemen are invited to participate.

NEW ORLEANS, La., Aug. 21d.—The first competition for the prize offered by the officers of the First Division L. N. G. took place this evening at the Washington Artillery Ranges, Spanish Fort. The weapon used was regular army rifle, but some of the men had been out of practice for over a year, and consequently their achievements were inconsiderable. The prize is to be won three times before becoming final property. The following is the score:—

LOUISIANA FIELD ARTILLERY TEAM.									
Weiss	1200 yards	5	4	3	3	4	4	37	55
Thompson	1200 yards	3	4	4	4	4	4	28	50
Fortier	1200 yards	5	5	4	4	0	5	5-23	50
Goldthwaite	1200 yards	3	3	4	0	3	5	23	49
Sullivan	1200 yards	4	4	2	3	5	4	20	43
Gschwindt	1200 yards	3	4	3	4	4	4	20	43
Total									306

CONTINENTAL ARTILLERY TEAM.									
Edison	1200 yards	3	4	4	0	2	3	37	32
Mally	1200 yards	4	4	2	3	3	3	22	48
Franklin	1200 yards	3	3	4	4	3	4	21	43
Pierce	1200 yards	3	5	4	4	3	3	21	43
Morse	1200 yards	3	3	4	4	4	5	23	52
Knight	1200 yards	3	4	4	1	3	4	23	50
Total									270

WASHINGTON ARTILLERY TEAM.									
Manion	1200 yards	5	5	4	3	3	4	4-28	242
Charlton	1200 yards	3	3	3	4	2	4	22	42
Solph	1200 yards	0	0	3	4	5	5	21	51
Bradford	1200 yards	4	4	4	5	4	4	30	61
Millic	1200 yards	5	5	5	5	5	5	30	34
Sporl	1200 yards	3	4	3	3	2	4	21	43
Total									420

ORLEANS ARTILLERY RIFLE TEAM.									
Schroeder	1200 yards	2	2	0	0	0	3	4-20	20
Gardner	1200 yards	2	2	3	3	3	5	22	27
Hussan	1200 yards	3	3	4	4	0	4	19	26
Sambola	1200 yards	3	3	0	0	0	3	7	15
Total									88

Two of the members of this team failed to shoot.											
Immediately after the Tyler medal was shot for by the Louisiana Field Artillery; fifth competition; 5 shots each distance:—											
Thompson.....	200 yards—20	43	Goldthwaite.....	200 yards—17	36						
	500 yards—23			500 yards—19							
Sullivan.....	200 yards—19	42	Guerin.....	200 yards—16	35						
	500 yards—21			500 yards—18							
Kerr.....	200 yards—17	38	Fortier.....	200 yards—13	33						
	500 yards—17			500 yards—15							
Weiss.....	200 yards—19	38	Gschwindt.....	200 yards—11	33						
	500 yards—19			500 yards—22							

This makes two winners for Thompson, two for Weiss and one for Gschwindt.

SAN FRANCISCO, Cal., Aug. 21d.—Shooting for places in the Creedmoor team to represent the military division of the Pacific coast, including the departments of California, Columbia and Arizona, began on Thursday last, at the Presidio reservation, and concluded to-day. Those competing were the persons making the highest scores in previous matches, of which there were 39. The following are the scores of the 11 highest, who are to represent this coast at Creedmoor:

First Lieut. T. L. Wilson, Fourth Artillery	278
Sgt. Peter Peterson, Company F, Fourth Artillery	267
Sgt. T. H. Sullivan, Company C, Second Infantry	263
First Lieut. W. R. Quinn, First Cavalry	261
Private E. C. Terry, Company H, Fourth Artillery	259
Sgt. John Wilson, Company M, First Cavalry	257
Private John Bernard, Company E, Sixth Infantry	251
First Lieut. William Ennis, Fourth Artillery	250
Sgt. P. F. Trotter, Company K, Twenty-first Infantry	243
Sgt. H. W. Homan, Company F, First Cavalry	241
First Lieut. H. P. Kingsbury, Sixth Cavalry	231
Private George W. Dougherty, Company M, First Cavalry	224
Private C. A. Homan, Company D, Twenty-first Infantry	221
Total	3,660

The gold medal donated by General McComb for the highest score made during the tournament was won by T. L. Wilson, First Lieut. of the Fourth Artillery, with 273 points.

BOSTON, Mass., Aug. 23d.—At Walnut Hill, to-day, the usual short range matches were shot. The day was fair one for the marksmen, although the wind, blowing strong from 8 o'clock, caused some trouble and necessitated constant watching, but careful attention by the gentlemen present resulted in some excellent scores. Subjoined are the scores:—

CREEDMOOR MATCH.									
W. Charles	1200 yards	4	5	4	5	5	5	5-48	
O. M. Jewell	1200 yards	5	5	5	4	5	5	5-49	
A. B. Archer	1200 yards	4	4	5	5	4	5	4-46	
C. G. Melgus	1200 yards	5	4	4	5	5	4	5-45	
J. B. Fellows	1200 yards	4	5	4	5	4	4	5-44	
H. Freeman	1200 yards	4	5	4	4	4	5	4-42	
G. Warren	1200 yards	4	5	4	4	4	4	5-42	
R. P. Buzzell	1200 yards	3	4	4	4	5	5	4-42	

MASSACHUSETTS MATCH.									
C. V. Melgus	1200 yards	12	10	9	11	12	9	12	108
J. F. Rabbeth	1200 yards	11	11	9	10	12	10	11	101
A. B. Archer	1200 yards	12	9	11	8	9	11	8	106

MEDFORD, Mass., Aug. 23d.—The Raymond Sportsman's Club held its regular shoot to-day at Bellevue range. In the 60 ball match C. A. Loke broke 48, W. B. Withersell 46, W. F. Brackett 44, J. F. Withersell 42, L. E. Johnson 40, and J. R. Smith 37. Following are the best scores made with the rifle:—

D. Kirkwood	6	5	6	5	5	6	5-55		
E. Adams	6	6	4	6	4	5	6	5	
E. James	5	4	6	6	6	3	4	5-51	
A. G. Cooke	5	6	4	3	5	2	4	5-45	
E. Freeman	6	5	3	5	4	3	5	2	5-45

The meeting closed on the 27th with small bore shooting. There was not much wind, but the light was very bad, and occasionally the targets could hardly be seen, owing to a haze hanging over them. The contest for first place was keen between Sergt. T. Mitchell and Lieut. Adams, the former winning by 2 points, the latter at 800 yards unfortunately making a bull-eye on the wrong target, for which he was fined \$1. The range prize for the greatest number of points at 1,000 yards was won by Lieut.-Col. Gibson with 32 points. At 6 o'clock the gun fired and the most successful meeting ever held by the Ontario Rifle Association was brought to a close. Ranges, 800, 900 and 1,000 yards; 7 shots at each range. The scores stood: Sergt. T. Mitchell, 79; Lieut. Adams, V. R. C. 85; Private O'Grady, Guards, 91; Private C. N. Mitchell, Tenth, 91; W. Mitchell, V. R. C. 91; Schwarz, V. R. C. 93; Lieut. Col. Gibson, V. R. C. 92; Staff Sergt. Lewis, O. R. 91; Private Joseph Major, V. R. C. 91; Major Fothergill, Thirty-fourth, 91; Staff Sergt. McLoughlin, Forty-eighth, 85; Lieut. Cruik, Second Division, 87; Lieut. E. F. Ewan, Bruce R. C. 87; Capt. Blair, Forty-seventh, 81.

SOUTH GARDNER, Mass., Aug. 24th.—The following scores were made at Hackmatack range to-day by members of the Gardner Rifle Association; 200 yards, off hand, using the inch ring and Creedmoor target combined, 2 scores of 10 shots each:—

	R	C	R	C	Totals
J. N. Dodge	85	45	84	41	169
G. F. Ellsworth	91	45	87	41	165
A. Mathews	87	44	74	43	161
Wm. Austin	75	43	84	43	161
H. S. Pierce	79	43	67	43	146
E. E. Newton	73	43	73	43	146
P. Nichols	73	43	70	41	143
Chas. Merritt	73	41	60	41	123
F. H. Knowlton	55	42	59	41	111
Chas. Smith	73	41	60	41	113

Six members of the Gardner Rifle Association visited the Ashburham Rifle Club last Wednesday and received a most cordial welcome. After shooting 3 scores each they returned home, well pleased with the range and members of the club.

MEDFORD, Mass., Aug. 25th.—The renewed competition in the Gold Medal and Bunker Hill Matches was shot to-day. In the Gold Medal Match there were 45 entries. The leading scores were:—

H. Kimball	5	5	4	5	5	5	4	5	5	5-48
C. H. Russell	5	5	5	5	5	4	5	5	5	5-48
P. Abbott	4	5	5	4	4	5	5	4	5	4-41
C. Hartwell	5	4	4	4	5	4	5	4	5	4-41
A. B. Archer	5	4	4	3	5	5	5	5	5	5-41
C. D. Harrison	3	5	4	5	5	5	4	5	5	4-41
J. Edwards	4	4	4	4	5	4	4	4	5	4-41
A. C. Greene	5	5	4	4	5	4	4	4	4	4-43
J. W. Webb	5	5	4	4	4	4	4	4	4	4-43
A. R. Teele	4	4	3	4	4	4	4	4	5	4-43

In the Bunker Hill Match there were 22 entries, and the best scores made were as follows:—

W. Charles	1200 yards	6	6	6	6	5	5	5-60
A. B. Archer	1200 yards	5	6	6	6	5	5	5-51
J. R. Teele	1200 yards	5	6	4	6	5	5	5-50
C. D. Harrison	1200 yards	5	5	5	6	4	5	5-50
C. H. Russell	1200 yards	5	5	4	6	4	5	5-50
A. C. Greene	1200 yards	5	5	5	5	5	4	5-50
N. P. Ames	1200 yards	6	5	5	4	5	4	5-48

The winners of the general prizes were A. B. Archer and W. Charles in the first, and A. C. Greene and N. P. Ames in the second class.

SHREWSBURY, Mass., Aug. 27th.—The following scores were made at the Pine Grove range yesterday:—

F. Weston.....	48	53-101	76	33	- 38	170
S. Clark.....	47	46- 93	84	84	40 41-81	171
M. G. Fuller.....	43	50- 78	109	101	44- 49	180
A. A. Bartlett.....	31	45- 58	99	81	41 39-80	170

Boston, Aug. 25th.—At Walnut Hill, to-day, the fifteenth competition at long range was shot. At the opening of the match a heavy rain fell, wetting the riflemen thoroughly. The day, with this exception, was a good one for shooting. Mr. Sumner made a brilliant record, 223, which has never been beaten at this range, with the exception of the score of 221 made by Mr. Sumner three years ago, and 221 by Mr. W. Gerrish in 1879. Appended are the scores:—

BOSTON, Aug. 25th.—At Walnut Hill, to-day, the fifteenth competition at long range was shot. At the opening of the match heavy rain fell, wetting the riflemen thoroughly. The day, with this exception, was a good one for shooting. Mr. Sumner made a brilliant record, 220, which has never been beaten at this range with the exception of the score of 221 made by Mr. Sumner three years ago, and 221 by Mr. W. Gerrish in 1878. Appended are the scores:—

J. S. SUMNER.									
800 yards	5	5	5	5	5	5	5	5-74	
600 yards	5	5	5	5	5	5	5	5-74	
1,000 yards	5	5	4	5	5	5	5	5-74-220	
800 yards	3	4	5	5	4	5	5	5-70	
600 yards	5	5	5	5	5	5	4	5-70	
1,000 yards	5	5	5	5	4	5	4	5-70-210	
800 yards	4	4	5	5	4	5	5	5-69	
600 yards	5	4	5	5	5	4	5	5-69	
1,000 yards	5	4	5	5	4	5	5	5-69-209	
P. L. BLAKE, JR.									
800 yards	5	4	5	5	5	5	5	5-72	
600 yards	5	5	5	4	5	5	5	5-72	
1,000 yards	3	4	5	5	4	5	5	5-72-193	
P. T. HOWE.									
800 yards	5	4	5	5	4	5	5	5-70	
600 yards	5	4	5	5	4	5	5	5-70	
1,000 yards	4	5	4	5	4	5	5	5-70-191	

THE MUG-HUNTERS' CHAMPION.—Boston, Aug. 27th.—Editor Forest and Stream.—Why do you not, in the next issue of Forest and Stream, give a list of the names of those whom you desire to stigmatize as "mug-hunters," or those who "shoot for ducks?" You might as well. According to your expressed sentiments, we should suppose that the gentlemen who honor Creedmoor by their presence should only come to shoot at a target, and sternly and with majestic indignation should decline all prizes, except the Leech and "Witchamungus" mugs, "must not be shot for." Let us hear no more of this vulgar and silly slang, or of these impertinent and impudently malicious allusions. Be sure they will reach upon FOREST AND STREAM, as a bad rifle does upon the marksmen.

A READER.
The remarks in our columns on the course of those who are notorious for the avaricious element in their shooting, have evidently struck home and brought out the above transparently anonymous protest. We can assure "a reader" that while the Wimbledon and Leech trophies shot for at Creedmoor are, in truth, "mugs," they can never become the prey of the mug-hunter. Of course, a meeting without prizes, or without some emblem of victory, would be an anomaly and almost an absurdity, but there is a wide difference between generous rivalry for emblems of victory, and making the possession of these prizes the whole aim and object of the struggle. We have seen riflemen who have gone into a match and have acquired themselves so well as to be adjudged worthy of a prize; and then, and not till then, did they concern themselves to find out what that prize was. This is one spirit of rivalry. Another one goes into competition as he would into a commercial speculation, considering his time and effort wasted if he be not the winner of more in cash value than he can spend in time and money; his point is to win, honestly if he can, but to win, and we have, as a result, the Wimbledon scandal and such squirming protests as that given above.

Archery.

—Address all communications to "Forest and Stream Publishing Company, New York."

PRIVATE PRACTICE CLUB.

ANNUAL REPORT FOR THE SEASON ENDING JUNE 30TH.

BECAUSE of the preeminence in archery to which Mr. Horace A. Ford attained, it is quite natural for us to acquiesce in any opinion by him formally advanced with reference to his once favorite pastime. The more faith we are to these opinions, because, like his arrows, they were all carefully delivered and with an aim. So careful was he in determining the truth of a theory before advancing it, that in the years that intervened between the appearance of the first and second editions of his work on the theory and practice of archery he did not wish to modify any idea which he had at first advanced. To many of us his opinion seemed so revolutionary that we were loth to adopt them, but no one can faithfully study his book without yielding to his unswerving logic, backed by his unapproachable skill. Looking to him as we do, as a model, who combined almost complete knowledge of his art with matchless powers of execution, it is the part of wisdom to give the utmost heed to his free and generous advice.

Nowhere in his writings, however, appears a more valuable truth than he conveys in these words: "Those who have not been in the habit of having one (daily) register can have no idea of the great intensification which it affords the most solitary practice, and how conducive it is to its steady and persevering continuance. It begets a desire to improve, for no man likes to have evidence before his eyes of his pains and exertions being of no avail, and himself at a standstill in any pursuit he takes an interest in. It insures a due carefulness in the shooting of every arrow, since without it the score will be bad, and, therefore, disagreeable to chronicle. It excites emulation, by enabling one man's average shooting to be compared with another's, and restrains by its sternly demonstrating figures those flights of imagination occasionally indulged in by bad memories as to feats performed and scores secured." By noting, too, in this register the causes of failure at different times, a student will avoid the error of occurring again, as it keeps the same always in the mind's eye, and their necessary avoidance prominently before the attention."

The Private Practice Club was formed to exhibit publicly the entire record of the shooting of every member, the gentlemen who moved in its organization believing that it would be of benefit to the members of the society, by inducing them to shoot more at long range; to preserve a record of every arrow shot; to abandon desultory practice and careless shooting, and to observe certain principles in practice.

That great success has attended upon their efforts is no longer an open question. Among the members there has been constant and rapid progression, not only in the value of the score, but in love for the pastime, in approach to true form in shooting, and in that most marked of all the characteristics of the good archer, the desire to attend our great public meetings and participate in the joys of the tourney.

A reference to the monthly reports will show how natural and rapid has been the change by members from the shorter to the longer ranges.

In February Class I. showed but a single member who shot an arrow at 100 yards, and nearly all scores of 72 arrows, while

thirty appeared in the records of all the members of the society, and has since continued. As to this conclusively appears that the members of the Private Practice Club have been by their attachment to the club, drawn to love and practice the long ranges and necessarily to keep a true record of every arrow shot, the question is pertinent "What proof appears that they have advanced more than archers who have pursued a different course?" The Grand National Meeting at Buffalo gave most convincing evidence that with rare exceptions the general advance of archers throughout the country has not kept pace with that of the members of this society. At that meeting, out of the 17 highest scores recorded, 12 were opposite the names of members of the Private Practice Club. Among the 12 lowest scores can be found only two names of members, and one of these shot only half the number of arrows. Could there be a stronger argument advanced of the wonderful advantage to be derived from membership?

Not that the other members of the society can aid the individual, but that his honor is bound to a certain method of practice which necessitates improvement. How strikingly the theory that practice at long ranges will assist the archer at short range was exemplified in the team shoot. The team winning first place was composed of 4 members of the P. P. C. The highest score at both 50 yards and 40 yards was made by a member of the P. P. C. who had shot only 3 scores at 40 or 50 yards in the year 1890.

Reversing the system, let us ask the advocate of short range practice if it would be possible for an archer who had been shooting only at 40 or 50 yards for one year, or for a lifetime, to accomplish a like result at a public meeting at 100 yards and 80 yards?

We have said that a characteristic of the good archer is to desire to attend and take part in our great public meetings. The founders of the P. P. C. believed that its members would naturally be attracted toward the National meetings, and the result has proved that they were right. Of the 31 members belonging to the club at the date of the National meeting, 14, almost one-half, attended and took part in the tourney. Of those who did not attend 4 were sick and 2 beyond the Rocky Mountains. The 6 gentlemen who traveled the greatest distances to attend the meeting were all members.

It is unnecessary to multiply evidences of the fact that the club has been a powerful aid to the National Association and to archery generally, as we wish to its members, by including a strong fraternal attachment among the members, which served to draw many of them to meet and compete with their classmates at the National meeting.

There being no real objection which can be urged against the "theory and practice" of the Private Practice Club, there is usually but one objection offered by archers why they do not attach themselves, and that is the necessity of keeping and preserving all his scores.

That this one thing has more than almost anything else to do with his improvement the archer will soon or later find out, and we hazard the declaration that the archer does not live who will not overestimate his ability unless he has preserved all his scores.

One objection made against the club by certain archers was the fact that the club offered cash prizes. This objection was removed by the change made in the constitution at the business meeting held at Buffalo when such prizes were abolished. While no member objected to the abolition of cash prizes, and while a great pressure was brought to bear upon the National Association to induce it to abolish cash prizes, it is a curious fact that out of thirty-three gentlemen who attended the national meeting and shot the Double York Round through, twenty-six shot in the subscription handicap, and three other gentlemen, to our own knowledge, Mr. Poldinehaus, Mr. Burnham and Mr. Doze, were in favor of cash prizes, and failed to shoot in the handicap only because they were very tired, and preserved themselves for the team shoot. So it would appear that opposition to cash prizes is only made by a few persons, and they such archers as do not expend the time and money necessary to attend our great public meetings. Of course there are exceptions, as we met two gentlemen shooting throughout the meeting who were opposed to cash prizes, but at any rate the Private Practice Club, out of its sincere desire to do good to as many archers as possible, removed this bar to the admission of the opponents of such prizes, and we shall expect to see the club enlarged from their ranks. The re-classification of members to be made by the Secretary, as provided by the amended constitution, will make the practice of members more pleasant, as archers will now compete in classes where the members are more nearly upon an equality. The amendment to the constitution required the Secretary to place members of like average skill in the same classes, so as to give as nearly as possible an equal number of members to each class, and he has done so to the best of his power, though in endeavoring to do so he has found it necessary to give class III, a few more members than either of the other two classes. There are many good reasons why the third class should be the larger one, if equality of members is not attainable. Archers shoot more regularly who shoot well, and almost all new applicants for admission desire place in the third class. After much comparison of records and taking into consideration the scoring of each archer at each range, the secretary has re-classified the club as follows:

CLASS I.
L. L. Peddinghaus.
T. H. Husey.
Will H. Thompson.
Frederic Devel.
C. G. Hammond.

CLASS II.
E. T. Church.
C. W. Kyle.
D. T. Patterson.
C. G. Snick.
C. S. Brownell.

CLASS III.
C. W. Sherman.
W. P. Lacey.
C. F. K. Baxter.
W. H. Robertson.
W. G. Beecher.
W. H. Orrance.
H. E. Jones.
E. P. Barlett.

No doubt the classification is faulty, and there are one or two members in the second class who would do honor to the first, and some in class III, whose rightful position would be in the second grade, but no division could be perfectly fair, and these errors of place occurred in several cases. From the fact that the archers failed to return the scores for April, May and June.

(TO CONCLUDE NEXT WEEK.)

NEW JERSEY.—New York, Aug. 20th.—Below you will find a rough draft of the archery match to take place at Waverly Park, N. J., during the twenty-second annual fair of the State Agricultural Society. The society will provide liberal prizes, and as the entrance fee is low, viz., \$1, it is to be hoped that the archers in this vicinity will turn out strong and give good encouragement to the managers, who are trying to introduce this noble pastime

to the public. Wednesday, Sept. 22d, 10 A.M., match for the New Jersey State championship, open to residents of the State only; society's gold medal and other prizes; single American round. Afternoon, 2 P.M., ladies' team of 3, open to all, Columbia round; gentlemen's team of 4, open to all, American round; also a longer range match of 24 arrows at each 60, 80 and 100 yards. Further particulars hereafter. W. HOLBERTON.

Cricket.

—Address all communications to "Forest and Stream Publishing Company, New York."

FIXTURES.

Sept. 24.—At Newark, Staten Island vs. Newark.
Sept. 4th.—At Stenton, Chestnut Hill vs. Young America.
Sept. 4th.—At Ardmore, Young America (20) vs. Merion (20).
Sept. 17th.—At Staten Island, Staten Island Juniors vs. Germantown Juniors.
Sept. 8th.—At Hoboken, St. George vs. Newark.
Sept. 8th.—At Stenton, Chester City vs. Young America (20).
Sept. 15th and 16th.—At Prospect Park, Manhattan vs. Staten Island.
Sept. 11th.—At Ardmore, Merion vs. Young America.
Sept. 11th.—At Harrowgate, Belmont vs. Girard.
Sept. 15th and 16th.—At Stenton, United States vs. Canada.
Sept. 15th.—At West Philadelphia, Chester City vs. Belmont (20).
Sept. 17th.—At West Philadelphia, Belmont vs. Staten Island.
Sept. 17th.—At Prospect Park, Manhattan (20) vs. Young America (20).
Sept. 18th.—At Nicetown, Girard vs. Germantown.
Sept. 18th.—At Ardmore, Merion vs. Belmont.
Sept. 23d and 24th.—At Stenton, Eleven English vs. Eleven Americans.
Sept. 23th.—At Harrowgate, Girard vs. Belmont.
Sept. 23th.—At Ardmore, Merion (20) vs. Girard (20).
Sept. 23th.—At West Philadelphia, Germantown (20) vs. Belmont (20).
Sept. 27th.—At Ardmore, Staten Island vs. Merion.
Sept. 27th.—At Nicetown, Germantown vs. Staten Island.

UNITED STATES VS. CANADA.—The Executive Committee of the Cricket Association of the United States on Aug. 25th, to arrange the details for the international match, to be played against All Canada, on the grounds of the Germantown Club, at Nicetown. It was decided to make a charge of twenty-five cents for admission, with an extra charge of twenty-five cents each day for reserved seats. The United States team will be selected on Sept. 3d.

At a committee meeting of the Ontario Cricket Association, held at the Roscoe House, Toronto, on the 21st ult., the following resolutions were passed:

"That the secretaries of the Montreal, the Halifax Town and Halifax Garrison Cricket clubs be requested to send two representatives each for consideration of the committee, with a view of selecting the international eleven to play against the United States."

"That each club shall assume the expenses of their representatives who may be chosen to play in the international match."

The match, East vs. West, played yesterday, at Toronto, between teams comprising gentlemen from Toronto, Windsor, Hamilton, Barrie, St. Catharines, Orillia, Chatham, Galt, Watly, Vanderburg (Toronto), Port Hope, Guelph and London, will decide, in many cases, the representatives of Canada in the coming match.

CHIPPewa vs. WELAND.—Played at Chippewa, Ont., Aug. 23d, and resulted in the defeat of the latter by 12 runs. Score:

First Innings.		Second Innings.	
G. Keller, b Wilson.....	10	b Wilson.....	3
Jepson, b Wilson.....	10	b Wilson.....	3
Johnson, b Wilson.....	10	b Wilson.....	3
Hugo, run out.....	0	c Cooper, b Wilson.....	11
MacKenzie, b Wilson.....	0	b Wilson.....	6
Greenwood, b Wilson.....	1	c Hooper, b Wilson.....	2
Schacht, b Wilson.....	1	c and b Wilson.....	0
Walter, b Wilson.....	1	b Wilson.....	0
Herbold, not out.....	1	b Wilson.....	0
Grey, c Hooper, b Wilson.....	0	b Wilson.....	0
Greig, c Smith, b Wilson.....	0	b Wilson.....	0
Extras.....	10	Extras.....	15
Total.....	48	Total.....	59

First Innings.		Second Innings.	
R. Wilson, c Jepson, b MacKenzie.....	3	c Schacht, b MacKenzie.....	2
McKenzie, b Wilson.....	3	b Wilson.....	4
Griffiths, b Wilson.....	4	b Wilson.....	3
Ledy, b MacKenzie.....	0	not out.....	0
Conner, not out.....	0	not out.....	0
Smith, c Wilson, b MacKenzie.....	0	b MacKenzie.....	3
W. Wilson, b MacKenzie.....	0	run out.....	0
Holmes, b MacKenzie.....	0	b Wilson.....	0
Cooper, b MacKenzie.....	0	b Wilson.....	0
Gardner, c and b MacKenzie.....	0	c and b MacKenzie.....	0
Griffiths, b Wilson.....	0	c Smith, b Wilson.....	0
Extras.....	21	Extras.....	37
Total.....	58	Total.....	57

ST. CATHERINE.		TORONTO.	
A. Boswell, b O'Brien.....	1	C. H. Sproule, b W. H. Merritt.....	61
W. J. Merritt, b Helmecken.....	9	H. Totten, not out.....	4
Conner, b Helmecken.....	15	C. H. Sproule, b W. H. Merritt.....	4
H. Merritt, b O'Brien.....	15	R. O. R. Jones, b Simpson.....	17
Simon, c Sproule, b O'Brien.....	23	D. O. R. Jones, b Simpson.....	15
Johnson, b Sproule, not out.....	0	W. V. Vickers, not out.....	0
Read, run out.....	1	G. B. Behan, run out.....	6
Eccles, b O'Brien.....	3	J. O. R. Jones, not out.....	0
Johnson, b O'Brien.....	3	W. V. Vickers, not out.....	0
Bodwell, not out.....	3	H. Helmecken, to bat.....	0
Hamilton, run out.....	0	H. V. Verbeer, to bat.....	0
Extras.....	6	Extras.....	21
Total.....	67	Total.....	145

ANALYSIS OF BOWLING.

TORONTO.				
	Overs.	Maidens.	Runs.	Wickets.
Ogden.....	11	4	16	4
Helmecken.....	10	1	28	2
Heban.....	2	0	8	0
Sproule.....	2	1	9	1
ST. CATHERINE.				
Hamilton.....	15	7	15	0
W. H. Merritt.....	14	4	40	2
G. Simpson.....	23	3	34	2
Connor.....	7	2	12	0
Read.....	7	2	12	0
Johnson.....	2	0	8	0
Hamilton bowled a wide.				

Hamilton bowled a wide.

LEAGUE OF WESTERN CRICKETERS.—After the match between the London and Chicago cricketers, a meeting was held at the Madison House, Chicago, Ill. Dr. E. J. O'Brien, President of the Chicago Club, was unanimously chosen to select a representative from each Western team, all to meet for the purpose of perfecting and arranging the details of the organization. It is the aim of this association to establish the game on a permanent basis in the West. The Chicago cricketers anticipate visiting St. Louis during fall week, Oct. 4th, when they will be accorded a hearty reception.

—This date, Barratt (for Surrey) took all 10 wickets of Australians at Oval, in 1873.

—In the match, Gloucestershire vs. Middlesex, played on Aug. 12th, Mr. A. J. Webb, played a teser, and his due hit innings of 142 was the feature of Middlesex innings of 253.

—In the match, Yorkshire vs. Surrey, Aug. 12th, Ulyett's 111 was a brilliant display of batting, without an absolute fault, but his vigorous, as he usually does, for 59.

CHICAGO vs. ST. LOUIS.—The return match between these clubs was played at Chicago on Aug. 16th. Won by the home club by 10 wickets:—

CHICAGO.		ST. LOUIS.	
First Innings.	Second Innings.	First Innings.	Second Innings.
A. Kerr, b Leslie.....	44	Not out.....	8
G. W. Kemp, c Chambers, b F. Hackett.....	1	b Kerr.....	4
S. McClellan, c and b F. Hackett.....	6	b Kerr.....	0
C. P. O'Brien, c Crutwell, b Leslie.....	0	b Kerr.....	0
W. F. Griswold, c F. Hackett, b F. Hackett.....	0	b Kerr.....	0
O. H. French, b F. Hackett.....	0	b Kerr.....	0
A. Shaw, b Leslie.....	15	b Kerr.....	0
Dr. O'Brien, b Roberts.....	0	b Kerr.....	0
C. H. Chambers, b Shaw.....	0	b Kerr.....	0
P. A. Gough, b Shaw.....	0	b Kerr.....	0
H. F. Billings, not out.....	7	Not out.....	5
Extras.....	21	Extras.....	1
Total.....	112	Total.....	14

ST. LOUIS.		CHICAGO.	
First Innings.	Second Innings.	First Innings.	Second Innings.
J. B. Gage, c and b Shaw.....	0	c McClellan, b Shaw.....	6
F. Hackett, b French.....	0	c Dr. O'Brien, b McClellan.....	4
Capt. Bellairs, b Shaw.....	0	c Kerr, b Shaw.....	0
P. A. Gough, b Shaw.....	0	b Shaw.....	0
C. H. Chambers, b Shaw.....	0	b Shaw.....	0
C. H. Lyle, c Kerr, b McClellan.....	2	not out.....	15
W. F. Griswold, b McClellan.....	4	b Shaw.....	0
G. M. Foster, c Kerr, b Griswold.....	13	c Billings, b Kerr.....	1
C. Hackett, c Sterling, b Griswold.....	7	c sub, b Kerr.....	2
Dr. O'Brien, not out.....	3	Extras.....	23
Extras.....	23	Extras.....	23
Total.....	66	Total.....	58

BOWLING ANALYSIS.

ST. LOUIS.		CHICAGO.	
Balls.	Runs.	Balls.	Runs.
Testle.....	102	50	1
F. Hackett.....	55	25	4
Ulyett.....	12	10	0
Robert.....	60	2	1
Gage.....	6	2	1

CHICAGO.		ST. LOUIS.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Shaw.....	81	21	2
French.....	24	23	0
McClellan.....	36	15	0
Griswold.....	19	6	1
Shaw.....	87	11	7
McClellan.....	34	10	5
Kerr.....	23	12	1

HAIGTON'S STATION ISLAND TEAM vs. RICHARDSON'S ST. GEORGE TEAM.—Played at Hoboken, N. J., Aug. 25th. Drawn:

G. E. Armstrong, c Inman, b Filmer.....	3	J. Satterthwaite, not out.....	49
Filmer.....	17	J. J. Filmer, b Armstrong.....	35
G. R. Jones, Jr., b Houghton.....	17	J. J. Filmer, b Armstrong.....	35
G. R. Jones, Jr., b Houghton.....	17	J. J. Filmer, b Armstrong.....	35

ST. LOUIS.		CHICAGO.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Shaw.....	81	21	2
French.....	24	23	0
McClellan.....	36	15	0
Griswold.....	19	6	1
Shaw.....	87	11	7
McClellan.....	34	10	5
Kerr.....	23	12	1

NEWARK vs. NEW YORK.—Played at Newark, N. J., and won by the home club by one innings and 23 runs:—

NEW YORK.		NEWARK.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Blaney, b Brewster.....	3	b Brewster.....	0
A. Blaney, b Borrie.....	0	b Brewster.....	4
D. H. Blaney, b Borrie.....	0	b Brewster.....	4
Giles, Jr., c Owens, b Borrie.....	0	b Borrie.....	21
Mansall, b Brewster.....	7	c Dittmar, b Brewster.....	0
O'Brien, b Brewster, not out.....	0	b Brewster.....	1
R. Bacon, run out.....	0	not out.....	0
Jones, not out.....	2	b Brewster.....	4
B. H. Blaney, b Brewster.....	0	b Brewster.....	0
James, b Brewster.....	0	b Borrie.....	0
Pollard, absent.....	0	absent.....	0
Lee-lyes, b wide 1.....	0	No ball.....	0
Total.....	20	Total.....	55

NEWARK.		ST. LOUIS.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Standford, b Giles.....	20	Hall, c Sub, b Allworth.....	1
W. Knight, c Sub, b Allworth.....	10	Kerr, c Morris.....	5
Dittmar, c Sub, b Giles.....	23	Hedrick, b Giles.....	8
Brewster, b Allworth.....	0	b Giles.....	0
O'Brien, b Allworth.....	0	b Giles.....	0
Borrie, b Giles.....	3	b Giles.....	0
Owen, c Morris.....	20	Total.....	98

The scorer of the Newark innings should be more careful in his reports.

OTTAWA vs. MONTREAL.—Played at Montreal, Canada, Aug. 23d. Won by the visitors:—

MONTREAL.		OTTAWA.	
First Innings.	Second Innings.	First Innings.	Second Innings.
E. H. Benjamin, c Fletcher.....	15	J. Brunel, b Liddell.....	1
L. Powell.....	15	J. H. Monk, run out.....	6
A. F. Revor, b Brodie.....	5	W. F. Lacey, c Smith, b Badgley.....	0
A. Browning, b Brodie.....	5	b Brodie.....	0
J. C. Badgley, b Brodie.....	8	H. Henry, c Fraser, b Liddell.....	23
J. W. Smith, c Johnson, b Fletcher.....	5	J. Smith, c Fraser, b Smith.....	23
Fletcher.....	1	b Fraser.....	0
Liddell, b Holbach, b Johnson.....	1	Capt. Holbach, c Dick, b Liddell.....	0
Smith, b Brodie.....	20	b Liddell.....	0
McMurray, b Liddell.....	7	V. Fletcher, c Fraser, b W. V. Fletcher.....	14
W. V. Fletcher, c Fraser, b W. V. Fletcher.....	14	b W. H. Smith, not out.....	0
Hamilton, not out.....	9	A. L. Jarvis, run out.....	1
Extras.....	51	Extras.....	9
Total.....	51	Total.....	107

The Montreal team went to the bat for a second innings and rolled up 115, but darkness set in by the time they were disposed of, and the game was decided on the first innings scores.

YOUNG AMERICA vs. GIRAUD.—The long talked of match between these first-class clubs came off, as announced, on Aug. 20-21st in the presence of a large number of spectators. In a late number of the FOREST AND STREAM we predicted that the champions would have their hands full, and although a cricket match

FIRST CLASS CENTER-BOARDS.			Corrected
Yacht and Owner.	Length.	Time.	
Shadow, J. Bryant	Fi. In.	H. M. S.	
Folly, J. F. Sheppard	33 00	2 51	5
Comfort, G. S. Fortney	35 00	2 56	25
Admiral, Almer J. Chandler	30 10	3 09	0
Nimbus, King & Clark	36 03	Withdrawn.	
Magic, E. C. Neal	35 00		
FIRST CLASS KEELS.			

Annie, George Murfin	31	09	
Albie, Deane, J. Bond	32	01	
Viking, S. P. Freeman	33	01	
Marquita, M. J. Kayle	34	04	
Cara, W. Anderson	35	05	Withdrawn.
Edith, W. H. Davis	36	11	
SECOND CLASS CENTER-BOARDS.			
Muriel, C. G. Weld	21	05	
Hedgie, J. P. Phinney	22	01	09 07 00
Expert, E. G. Southler	23	11	06 20 00
Eugenia, G. West	24	02	07 07 10
Venus, Brown Bros.	25	06	12 07 00
Allie, Chapman & Watties	26	06	13 06 00
Undine, T. Lowe	27	02	12 25 00
Posey, J. McKee	28	01	13 18 00
Barbara, J. P. Fuller	29	06	13 06 00
Fiona, W. Gray	30	09	13 61 00
Edith, E. Denton	31	04	20 11 00
Ella, V. T. T. Smith	32	05	Withdrawn.
Unknown, R. H. Hamilton	33	01	Withdrawn.
SECOND CLASS KEELS.			
Fairy, C. A. Perkins	23	04	1 69 50
Lena, E. Creighton	24	08	1 70 10
Wilfred, Paul Butler	25	06	1 12 43
Emma, F. H. Blann	26	09	1 12 43
Emily, C. A. McNamns	27	05	1 12 43
Whitehouse, J. & Bros.	28	03	1 13 22
Gem, Frank Lincoln	29	09	1 15 10
Sunbeam, Kenney & Fox	30	06	1 15 30
Banner, A. & Daniels	31	06	1 17 00
Judith, E. T. Pigeon	32	11	1 17 00
Echo, W. L. Keith	33	06	1 17 00
Unknown, A. H. Hamilton	34	01	1 20 00
Evelyn, C. H. Nowell	35	01	1 20 00

Possie, S. O. Kildu	23	10	} Withdrawn.
Gracie, J. Donovan	23	10	
Fearless, A. Kidd	25	00	

Fifteen minutes later the third and fourth classes were sent away and made an exceedingly fine race of it, the water being

THIRD-CLASS CENTERBOARDS.			Corrected
Name and owner.	Length	Time.	Time.
	Ft. In.		
Janet, W. L. Phinney.	17	30	1 03 24
Topsy, C. E. Kent.	18	07	1 05 25
Clara B. W. B. Lamb.	18	07	1 05 25
Wave Crest, E. B. Rogers.	18	08	1 06 16
Pancy, C. H. Knight.	19	02	1 09 40
Peri, F. H. Cabot.	18	08	1 07 10
Suewater, W. M. Merrill.	17	03	1 05 11
Waterwitch, Hutchins & Prior.	19	08	1 08 11
Shamrock, M. J. Driscoll.	18	08	1 07 11
Thistle, Freeman & Bullard.	20	08	1 12 55
Unique, Stewart.	19	10	1 16 06
Holden, J. W. H. H. H.	19	04	1 10 04
Sandwich, H. N. Faxon.	17	02	1 15 11
Glance, M. Knight.	17	07	Withdrawn
W. H. H. H.	19	04	1 10 04

HULL YACHT CLUB.

THE hull regatta of this new organization was set down for Thursday, Aug. 26th, and brought out a big lot of starters. The manner in which new clubs spring into life in the East, and make a name for themselves in the first year of their existence, strikes you. The Hull regatta was the sports in those latitudes. No sooner is an open or union regatta announced than a perfect run is made upon the secretary, and the entries form his list. A large amount of spirit—should be exhibited on the part of owners is most creditable to them, and indicates a feeling of rivalry. The water was very smooth, and the boats were all strangers to us. To be sure, the yachts in Boston and vicinity are much in tonnage than the average of the other clubs, but the fact that they are so numerous offsets the amount of sport to be got out of them, but, on the contrary, is one of the reasons of its popularity. It is the absence of such a large number of boats that makes the regatta of our most deplore in New York, and we would willingly see the man trap sand bag in-chains give way to something like Empress and the other clubs, and the regatta of the Eastern coast from Provincetown to Eastport. The regatta of the Hull Yacht Club is a very interesting affair, and is expensive and must be confined to the rich would very soon give way, and many men with a few hundred a year to spare would be attracted to it, there and dress themselves about our

THE union regatta of this new organization was set down for Thursday, Aug. 26th, and brought out a big lot of starters. The manner in which new clubs spring into life in the East, and make a name for themselves, is a thing to be noted in those latitudes. No sooner is an open or union regatta announced than a perfect run is made upon the secretary, and the boats are ordered to be ready to start. The fact that the regatta should be held on the part of owners is most creditable to them, and indicates a widespread love for the water in the East. The boats in the regatta were of all kinds, but the yachts in Boston and vicinity are smaller in tonnage than the average craft hailing from the metropolises, but this in no wise affects the amount of sport to be got out of them, but rather increases it. The absence of the large yachts, and the presence of a society of healthy cabin boats from 20 to 30 feet, water line that was most deplorable in New York, and we would willingly see the name of the regatta changed to "cabin boat regatta." The names of the boats were Gael, Binner, Sunbeam, Fairy, Echo and the vast horde of other little shavers of honest build and form, which infest every harbor in the East. The regatta was a success, and the regatta of Maine. With such a fleet at our very doors, the notion that yachting is expensive and must be confined to the rich would very soon give way, and many men with a few hundred a year would soon be able to take part in the regatta.

FOURTH-CLASS CENTERBOARDS.					
Flora Lee, L. A. Freeman		16	00		1 01 4
Rockett, B. F. Bass		15	10		1 09 2
Nattie, S. G. King		15	00		1 08 4
Crockett, C. Cary		16	21		1 09 2
Elmer, P. Chubbuck		16	09		1 11 1
Dolly Varden, A. B. Coveley		17	00		1 12 0
Butterford, J. B. Turner		19	00		1 15 5
Wanderer, J. Turner		18	00		1 17 1
Josephine, J. F. Moors		16	03		1 16 5
Lara, C. H. Henry		16	01		1 16 0
Ildewild, N. N. Curtis		16	08		1 22 0
Cyrtie, J. H. Wood		15	09		
Zip, G. W. Morton		15	10		Withdrawn
Sheila, J. H. Conant		17	02		
FOURTH-CLASS KEELS.					
Mary, J. C. Clark		16	03		1 11 5
Nonpareil, J. W. Mansfield		16	00		1 18 5
Hattie, S. G. King		12	19		1 18 5
Baby, N. E. Schuchman		12	08		Not taken

The town of Hull made the day a holiday, something after the style of Cowes, Isle of Wight, during the "Squadron week." But the racing was delayed by a heavy rain storm which came on Tuesday evening. It was quite a pity that it did not wait until Saturday will repeat its great regatta day and that the entries will be even more numerous than they were last Thursday. The Hull Yacht Club has made the day a holiday.

QUINCY YACHT CLUB.—The special matches were held Aug. 25th, of Meigs' Hotel, to sail off for the championship in second and third classes. Judges—G. W. Mort, J. D. Pennington and H. F. Farnald. Wildfire and Flora Lee were the winners as under:

	SECOND CLASS.	
Name and owner.	Actual Time.	Corrected Time.
Wildfire, H. A. Keith.	2 41 55	2 11 31
Glance, M. Knight.	2 50 40	2 21 14
Janet, W. L. Phinney.	2 56 50	2 27 22

	THIRD CLASS.	
Name and owner.	Actual Time.	Corrected Time.
Flora Lee, S. A. Freeman.	11 51	1 36

Sept. 3.—Hull Y. C., Regatta.
Sept. 4.—Boston Y. C. Annual Regatta.
Sept. 9.—Provincetown Y. C., Fall Regatta.
Sept. 9.—Long Island Y. C., Mistakes.
Sept. 9.—Royal Bermuda Y. C., Cup and Subscription Races.
Sept. 11.—Quincy Y. C., Fall Regatta.
Sept. 11.—Royal Nova Scotia Y. C., Mayor's Cup.
Sept. 11.—Washington Village Y. C., Regatta.
Sept. 11.—Boston Y. C., Fall Regatta.
Sept. 13.—Quaker City Y. C., Fall Regatta.
Sept. 18.—Beverly Y. C., Sloop "Nahant."
Sept. 18.—Royal Nova Scotia Y. C., Flag Officers' Prizes.
Sept. 23.—South Boston Y. C., Clam-bake.
Sept. 23.—Beverly Y. C., Sloop "Nahant."
Sept. 23.—Royal Nova Scotia Y. C., Slooping Cruise.
Sept. 23.—Quaker City Y. C., Closing Cruise.
Sept. 29.—N. Y. Y. C., Cape May Clam-bake cup.
Oct. 9.—Royal Bermuda Y. C., Cruising Trim Race.
Oct. 9.—Washington Village Y. C., Fall Regatta.
Nov. 2.—Royal Bermuda Y. C., Cruising Trim Race.
Dec. 1.—Royal Bermuda Y. C., Cruising Trim Race.
Sept. —Clyton, N. Y., Regatta.
Sept. —Oswego, N. Y., Regatta.
Sept. —Kingston, Ont., Regatta.

IF it were possible to have a competent reporter on board every yacht engaged in racing or while on a squadron cruise, the performance of many a craft would be painted in very different colors from what it is. During the cruise of the N. Y. Y. C., recently brought to a close, many interesting features have been lost, and

replied calmly giving full information of the classification and the number of boats entered. He was very successful in directing strangers to the line. We all know how difficult it was to raise a few hundred here in New York for the recent Bay Regatta, but in Hull it was easily secured without any trouble. Classes were as follows:

Special for schooners over 28ft. and under 50ft., prizes \$40 and \$20.

First class, for all yachts 20 to 35ft., waterline, prizes of \$100 and \$50.

Second class, for all yachts 16 to 20ft., waterline, prizes of \$50 to \$20 ft., prizes \$25, \$15, \$10 for keels and also for centerboards; third class, for all yachts 17 to 21ft., prizes \$20, \$12, \$10.

Fourth class, for all yachts under 17ft., prizes \$15, \$10, \$7, \$5, with the first two only for keels. Open to all yachts belonging to any regularly organized club or association.

The regatta was held at the following places: The sloops of third and fourth class, which were restricted to plumb-sails only to obviate the heavy expense of ballastmen and rigging, sailed from the wharves; the sloops of second class, which have kept aloof; no shifting ballast in first three classes—crews, one man to every 50 ft. of water line; no sharpies or catboats.

No. 1 Black Brush Buoy, thence out Hull Gut, down Lighthouse Channel, leaving Toddy Rocks Buoy and Point Allerton Buoy on the starboard to Bell Buoy on Harding's ledge, then up to the northward, passing the light house tower, Gallon's Head Buoy, Lovell's Island and Fort Warren on the port, Gallop's Island on the starboard, through Hull Gut to judges' boat, 18 nautical miles off the shore, where they anchored.

From there they went to Warrel Buoy, to white flag off Strawberry Hill, to red flag off Dunkin Island, out Hull Gut to Bell Buoy on Harding's ledge, then back to the harbor, round the point, leaving Bell Buoy on the port; returning leave Point Allerton Buoy and Toddy Rocks Buoy on the port; then to the harbor, leaving the point on the port, and the rest.

From Judges' line, passing White Warrel Buoy, to white flag off Strawberry Hill, to brush buoy off west end of Dunkin Island, to black flag off the shore, then to the Beacon, to white flag off Petrick's Island and to judges' boat.

Particulars. Regatta Committee: Messrs. W. B. Lambert, C. H. Perkins, A. Perkins, T. Hutchins, H. P. Stanwood, John Read, T. F. Patterson. The pilot boat Sprite, No. 5, was used as judges' boat. There were thirty-eight entries, and six tyne cutters, all of them new, and some of them of the best material and of solid proof of the rapid strides into public favor the noble art of sailing is making. Among the schooners only two appeared, and they were late. At 2:30 P.M., the wind blowing fresh from southeast. By the time Pilot Allerton had been brought aboard, Adrienne had a lead of about half a mile, and she was followed by the other boats. Not awarded, as there were not 3 entries or more as the rule required. Adrienne's time was 41 min. 18 s. In the first and second races she won by 10 minutes. She was the last to start, and toward the end of the race, and it was hard work to fetch the line against a strong ebb tide. This was accomplished as under-

NEW BEDFORD CLUB.—The races for the purse of \$50 presented by Mr. Thos. Nye, was sailed Aug. 25th over a 21 mile course in Buzzard's Bay. The entries were: *W. Parker*, owner; *Painter*, 31ft. 2in.; *David L. Parker*; *Nixie*, N. H. Edmunds; *Whistler*, 33ft. 1in.; the *W. Parker* was the victor, beating *Nixie* 2m. 11s.; *Painter* 2m. 56s.; *Whistler* 2m. 56s.; *David L. Parker* 2m. 11s. During a squall *Whistler* sprang the boom, and *Painter* cracked her boom and *Painter* sprang the boom.

HULL YACHT CLUB.—The burgee adopted by this club is triangular in shape, yellow field, black diagonal cross with white stars in its center.

NEW BEDFORD CLUB.—The third race of the cat rig of the club for the G. H. L. Sharp pennant was sailed Aug. 25th of Harrison square. Entries: *Nattie*; S. G. King; *Nora*; G. Denney; *Druid*; *1* for *Nora* and *1* for *Nattie*, necessitating a sail off. The results were: *Nattie* 1m. 45s.; *Nora* 2m. 55s.; *Druid*, 1 for *Nora* and *1* for *Nattie*, necessitating a sail off.

PICTON YACHT CLUB.—A club has been organized in Pictou, N. S., and the following are the officers: *President*, Capt. W. H. Stanton; *Secretary* and *Treasurer*, E. Merrill; *Committee of Management*, His Honor Judge Jellett, Sheriff Gillespie, J. J. MacGregor, Geo. McKenney, W. P. Reynolds, Peter Stokewee, Hugh McSweeney.

MALDEN CLUB.—The third race for the club cup, was sailed Aug. 25th over a 21 mile course in Buzzard's Bay. The entries were: *2m*, *Beaman*, *beating* *Maud* 5m. 55s.; *Scud*, *Alliance*, *L. Tappin*, *Clara*, *Marion* and *Kippie* in the other named.

THE 'NEW SFEAMER'.—Romancing concerning Mr. Lordland and his new steam tug, the *W. Parker*, published in the 25th of August, is a very untrue and untrue. The *W. Parker* is 34ft. 2in. long, 12ft. 6in. beam and 9ft. 3in. deep. Small blame to the builders, Messrs. Ward & Stanton, if they refuse responsibility for such wild statements. The steamer will be left, shortly, in England.

C. C. W., New London.—We do not know of any particular breed of dogs that uniformly make good squirrel dogs. A squirrel

T. C., East Poutney, Vt.—I am a young man, twenty-four years of age, and am naturally fond of sport, and what I would like to know now is, could a fellow make a living hunting game, say during September and October. If I could I would get a pointer or setter and hunt where game is plenty, especially of the feathered tribe. Ans. If you are counting about for a permanent employment we should by all means advise you to learn a trade or to engage in some of the ordinary pursuits of industry. You cannot make a decent living by hunting; there are too many men trying to do that now. Stick to your work if you have any; if you have not find something besides bird shooting. You are young yet, but even at the age of twenty-four you can ill afford to go off on any wild goose chase.

AMATEUR VICT.—I have a pointer puppy suffering from a humor, which I am confident is neither mange, scurf or smallpox. The eruption in its first stage consists of small red pustules about half an inch apart; these rapidly grow into ordinary looking pimples or boils, and expand into what looks like water blisters the size of an old-fashioned three cent piece, and full of thick yellow matter. These pustules break, a scab forms, which comes off whole, taking the hair with it, leaving no scar or (as in smallpox) brown spot. The eruption is principally confined to the body and does not seem to cause any itching. The dog has a peculiar sickening odor, is feverish, very much depressed, bowels cold and appetite fair. Any information will be gratefully received. Am g.vine

the dog scumite and arsenic, homoeopathically. Ans. Give two or three drops of Fowler's solution of arsenic three times a day. Discontinue the scumite. Give two grains of quinine three times a day, and apply either sulphur ointment or the following mixture externally: Powdered bicarbonate of potash, one ounce; powdered white vitriol, one quarter ounce; sub sulphur, two ounces; lard, eight ounces. Mix and rub well into skin. C. D. A., New York.—Your answer to C. J. C. prompts me to ask another question of a similar nature. Under the head "Fish in Season," I formerly read "Land-locked Salmon, *Salmo gairdneri*." Now it is changed to *Salmo salar*, with nothing to distinguish it from the true salmon. Has it only been ascertained, after all these years, that the two fish are identical, and is there really no such thing as land-locked salmon in a sense entitling it to a name of its own? Ans. Gairdner described the land-locked salmon as *Salmo gairdneri*, supposing it to be a distinct species; and although he found differences enough in some specimens from Sebago Lake to found another species upon, which he called *S. salar*. Later naturalists consider them as only varieties of *S. salar*, and not different species. They differ only in color, and are simply the common salmon with its habits changed. If you have read the paper attentively you will see there have been changes in the fishery department, of which this is only one. The angler can see differences in color between the land-locked and common salmon, but zoologists requires different structure to found a species.

FOREST AND STREAM.

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Advertisements. Inside pages, nonpareil type, 25 cents per line; outside page, 40 cents. Special rates for three, six and twelve months. Reading notices on editorial pages, 50 cents per line—eight words to the line, and twelve lines to one inch. Advertisements should be sent in by the Saturday of each week previous to the issue in which they are to be inserted. We cannot receive new advertisements, nor alter standing advertisements later than Tuesday morning.

Correspondence. Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention.

Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

Address. All communications, relating to the business or editorial departments of this paper must be directed to FOREST AND STREAM PUBLISHING COMPANY, New York City, N. Y.

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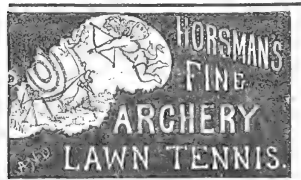
KEEP'S SHIRTS, the cheapest. KEEP'S PAT. GARMENT-MADE SHIRTS, easily finished. KEEP'S KID CLOVES, none better. KEEP'S UNDERWEAR, the best. KEEP'S UNDEWEAR, the strongest. KEEP'S JEWELLED, rolled gold plate. KEEP'S NECKWEAR, latest novelties. KEEP'S BEST CUSTOM SHIRTS, made to measure, 6 for \$10. KEEP'S PAT. PARTLY-MADE SHIRTS, 6 for \$7. KEEP'S GOLD PLATE COLLAR AND SLEEVE BUTTONS, free with every half dozen of KEEP'S SHIRTS. KEEP'S SHIRTS delivered free in any part of the Union, at KEEP'S risk.

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GIVES SPLENDID SATISFACTION.—A HANDLER makes the DRAW much EASIER. Fingers never touch the string. A HAIR THINGIE to loose instantly and smoothly. THE HELPER TO THE FINGER and THE EASE OF DRAW gives ACCURACY TO THE AIM. PRICE \$1. Liberal Discount to Clubs at 50c or More. Send for circular. Address S. E. FRENCH, Metropolitan Club, N. Y. City.

Experienced Sportsmen

Buy their Shooting Suits of G. W. Simmons & Son, (Oak Hall, Boston), who are the makers of the Prize medal "Boston Shooting Suit," which is the very best that is made; never tears, or rips—has its seams sewed with silk and linen—and its buttons so securely fastened they never come off. If any one wants the proper outfit let him send to

G. W. Simmons & Son, OAK HALL, 32 to 44 North Street, Boston.

LAKE RONKONKOMA.—One mile from Lakeland, L. I. The central resort of the island for shooting and fishing. The hotel will remain open during the season. Terms \$1.50 per day. MRS. L. FINCH, Proprietor.

Spanish Silk Worm Gut.

THE GREAT REDUCTION in the quality of this article, and the increasing admixture of rough strands, has forced us to go into the manufacture of it for our own account. Our Mr. Imbrie has just returned from Murcia, Spain, where all the high quality gut is made. While there he organized the most extensive and perfect factory for making this article in the world. The grades named below will run at least 25 per cent better than those of any other manufacturers.

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Corta	\$1 00	Padron 1st Superior	7 50	Regular Superior, 16 inches....	13 00
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Miscellaneous.

B. F. NICHOLS & CO.,

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36 Beach Street, Boston, Mass. MANUFACTURERS OF FINE SPLIT BAMBOO SALMON, BASS AND TROUT FLY AND BAIT RODS of best quality. Six strands from butt to tip German silver mountings. EVERY ROD WARRANTED. Satisfaction guaranteed. Send stamp for price-list.

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English Archery. Lawn Tennis, Etc., NEW YORK.

Bogardus' Book, FIELD, COVER AND TRAP SHOOTING. PRICE \$2. FOR SALE AT THIS OFFICE.

The Kennel

RED IRISH SETTER PUPS FOR SALE.

Several handsome, pure red Irish Setter puppies, whelped July 20th, 1890; sire, champion story O'More; dam, my red Irish bitch, Nora (champion Berkeley ex Talley), winner first prize at New York, 1890. Price: Bitches, \$20; dogs, \$35. Address C. H. DAYTON, Peekskill, N. Y. Sept. 1.

CHAMPION GLEN GORDON PUPS.—

For sale—a brace (dog and bitch) of very handsome black and tan Gordon Setter puppies, perfectly marked with dark rich tan, whelped July 31st; dam, Fanny (champion Grouse ex champion Hope). Fannie is a great beauty, and is thoroughly broken on game; sire, Dr. Allen's champion Glen (Colburn's Dash ex Belle, winner of first prize in brace stakes, Eastern Field Trial, 1891. Now wanted at a small price for delivery. Price: Dog, \$20; bitch, \$18. For particulars and particulars, address W. H. PIERCE, Peekskill, N. Y. Sept. 21.

DOGS RID OF FLEAS AT ONCE BY

using "A No. 1" Flea Powder. Sent in patent box on receipt of 25 cents by ADAMS & CHASE, Sherborn, Mass. Aug. 19, 1mo.

WANTED—AN ENGLISH SETTER

dog, not over three years old; must be an extra good worker on woodcock; must have a line nose, very staunch on point and a nice tender retriever; must be seen on game. Address: Full description and lowest cash price, P. O. BOX 201, Monticello, N. Y. Sept. 21.

FOR SALE.—A large liver and white pointer dog, two years old, was hunted last fall; and a lemon and white pointer bitch pup five months old. No. 1 stock; a beauty; will make a prize winner; price \$25 each, or will exchange for a B. I. gun, or a thoroughly broken setter or pointer, dog or bitch. Address: ADAMS & CHASE, sep. 21. 318 Eighth street, Jersey City, N. J.

FOR EXCHANGE.—An 8-gauge, 34-inch barrel, 121-pounds W. & C. Scott & Son breech-loader, with leather case, loading implements, 75 brass shells, 75 duck decoys. Will exchange for a 7 or 11-pound gun, reliable maker. Address: E. C. Lock Box 316, Foughkeepsie post office, N. Y. Sept. 23.

The Kennel.

SECOND ANNUAL

BENCH SHOW OF DOGS,

GIVEN BY THE

ST. LOUIS KENNEL CLUB,

Will be held during the great St. Louis Fair, on the Fair Grounds, October 5th, 6th, 7th and 8th.

Prize Lists and forms of Entry can be had of CHARLES LINCOLN, Supt.

Office 604 North Fourth St., St. Louis, Mo.

Entries close September 20th. Sept. 25.

FOR SALE,

Two dog and one bitch pointer puppies, by Mr. Edmund Ogilvie's Champion Rush, out of my Irish Setter bitch, whelped July 3d, lemon and white, all very strong and handsome. Price \$50—dog or bitch. ALSO—

POINTER BITCH—"CHARM."

Same sire and dam, one year old, very handsome and perfect in every way; will be capital worker. I reserved her for my own use, but find I have more than I can use, and will part with her. Price \$75. GEO. VAN WAGENEN, 212 West street, New York City. July 1st.

FOR SALE—Cocker spaniel bitch, Daisy II.

She is dark liver and white, three years old now, in which to champion imported Charlie. I have won first prizes in England and America, and is considered by good judges to be as fine a cocker dog as there is living. LOOK FOR SALE, Suspension Bridges, N. Y. Sept. 21.

PURE BRED BULL TERRIER PUPS.

Orders received for pups from imported white bitch 9 days and John Bull's Victor, champion dog of America. Topsy will whelp on Sept. 21. Address: BEACON KENNEL, 21 Myrtle street, Boston. Sept. 21.

FIELD TRAINING.—I will take one pair of

well bred setters to break over game this fall. One pointer and two setters for sale, \$75 each. For particulars apply to CHAS. F. KENT, Mountain Kennel, Monticello, Sullivan County, N. Y. Sept. 21.

FOR SALE—A thoroughly broken

pointer dog. Good retriever from land or water and first-class in every respect. JOSEPH WILLIAMS, Box 228, Moodus, Conn. Sept. 21.

IMPORTED IRISH SETTERS AT A

sacrifice. "Red Grouse," and "Quail III," N. Y., 1874, second, 1879. Address EDWARD LOHMAN, 171 East Eighth seventh st. Aug. 23.

FOR SALE OR EXCHANGE.—A young

setter dog, nine months old, in perfect health; sire by E. S. Knowles' dog of Worcester, Mass.; dam purchased of W. H. Pierce, of Peekskill, N. Y. Will sell low or exchange for an "Osgood Canvas Canoe" in first-class condition, or for any first-class rifle. W. H. WHEELER, Agent Wheeler Cotton Mills, Millbury, Mass. Sept. 21.

The Kennel.

NEBRASKA

Field Trials

The First Annual Meeting

WILL BE HELD UNDER THE AUSPICES OF THE NEBRASKA STATE

Sportsmen's Association,

AT MILFORD, NEB., SEPT. 30th AND OCT. 1st AND 2d, 1890.

Open to the World.

NATIONAL AMERICAN KENNEL CLUB RULES TO GOVERN.

Send stamp for programme.

J. H. HARLEY, Secretary, LINCOLN, NEB. Aug. 19, 18.

For Sale.

THE finest cage of its size ever manufactured is for sale at \$500. Cost to make, \$1,500. Size, 58x feet base, and 5 feet high. This was made for the Centennial Exposition, and is first class in every respect. W. J. KNOWLTON, Natural History Store, 168 Tremont street, Boston, Mass. Aug. 19, 90.

FOR SALE,

An Earthly Paradise. PLEASURE, HEALTH, HAPPINESS. Address BOX 97, CAMBRIDGE, Md. May 1890

MID RANGE RIFLE FOR SALE—A

new mid range Remington rifle for sale; never having been shot; 40 cal., 30in. barrel. Creedsmore stock, high power, Vermer real wind gauge front sight, with spirit level, rubber butt and tip and checked fore end. Warranted new and perfect every way or no sale. Price \$15 (the regular retail price is \$25). Address A. F. M. Brownfield House, Boston, Mass. Sept. 21.

FOR SALE—A Maynard Rifle, two bar-

rels and outfit, cheap, can be seen. E. S. HARLIS & CO., 177 Broadway, N. Y. Sept. 21.

WILD RICE SEED for sale, \$1 per

bushel. Supply limited. R. VALENTINE, Jansville, Wis. Sept. 21.

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DESIRES FOR SALE, 37 PER FAIR, \$1 FOR SINGLE FEMALE, \$1 FOR SINGLE MALE. CHARLES H. VAN VECHTEN, Sept. 21. Victor, Ontario County, N. Y.

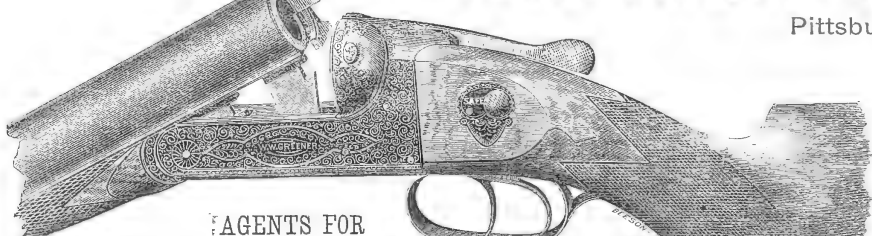
EIGHT-BORE GRANT GUN, No. 3472.—This

C. F. gun has recently been missed by the owner, who would be glad to pay \$50 for its return to him. Send C. F. to D. DAVID KING, J. Newport, R. I. Sept. 21.

W. PALMER O'NEIL & CO.,

68 FIFTH AVENUE,

Pittsburgh, Pa.



AGENTS FOR

W. W. GREENER'S PREECH-LOADERS.

NOW IN STOCK, a full line of every grade, from his New \$85 Gun up to his Finest Hammerless Guns. It will pay you to send us a memorandum of such a gun as you want and GET OUR QUOTATIONS. Remember we will send you a gun subject to inspection and trial on receipt of remittance sufficient to pay express charges to your place and return hammer. SEND STAMP FOR CATALOGUE.

The Kennel.

TO BREEDERS AND SPORTSMEN.

The following very valuable high bred setters and pointers (nearly all imported from the most renowned kennels in England, regardless of cost), all of which have the finest pedigrees, on the show bench and in the field.

Sold for no fault; they are healthy and strong, and very handsome, and warranted as described, and are sold simply to reduce my kennel, being overstocked. Four of the dogs offered for sale were exhibited by me at the Westminster Kennel Club dog show, where I took the silver tankard, valued \$500, for the best kennel of dogs (quality and variety) owned by one individual or club in America.

ENGLISH SETTERS.

Sepoy, by Gladstone out of Mersey, orange and white, whelped March, 1879; very promising; now in Mr. Wamman's hands, breaking.

Duke of Beaufort, pure Laverack, whelped February, 1891; color black, white and tan; by Pride of the Border, out of Fairy II; very handsome, magnificent coat and feather; took second prize W. K. C. show, 1890, in the Imported English setter dogs. First time he was ever shown.

Imp. Norma (C. K. C. S. B. 5070), by Dan (1330)—Nellie (1532); c. color, black, white and tan; whelped 1875. Perfectly broken in the old country; never been shot over in this country; only been imported four months.

POINTERS.

Imported Bang { Lloyd Price's Bang, 730.

whelped May, 1879; color, dark liver and white; very handsome; not broken; invaluable as a stud dog, has the finest blood in England, both on his sire and dam's side.

Bellata, pointer bitch; color, lemon and white; whelped April, 1891; own sister, same litter. O'Neil's champion Ross, by Flake (124) out of Lily; very handsome and grand field bitch.

Imp. Belle II, pointer bitch, color, liver (dark) and white; whelped February, 1876; own sister to Bow Belle, by Bang (730)—Leache's Belle; was sold as a perfectly broken bitch, but has never tried her, as she was in whelp when I bought her in March, 1881; she is very handsome and an excellent mother.

Imp. Countess Luna, pointer bitch; color, grey, dark liver and white; whelped about June, 1878; by Bang (730)—champion Luna (1301); the finest bred bitch in England; was awarded by Garnet in England, and her pups, which are now wanted, and without exception, all sold, and had she double the number, I could have sold them; unbroken.

IRISH SETTER.

Betty; color, dark red; whelped January, 1870; by Stoddard's Bob, out of Kitty (1732); has a splendid litter of pups, by champion Borkley, ready to wean; sold without her pups or with them; never been broken in the field, but very tractable.

GORDON SETTER.

Imp. Nell, whelped 1876; color, rich black and tan; winner first prize, Birmingham, 1877; very handsome; by Bruce (1570), out of Smith's Daisy; not broken.

COCKER SPANIEL.

Dalsey, whelped January, 1871; color, rich dark liver and white; by Conroyville, Dash—Finley's Daisy; awarded by champion Charlie.

For further particulars as to pedigree and price, address CAPTAIN BLAKE, Kennel Manager Moorfield Kennel, General Wayne P. O., Montgomery County, Pa.

MOORFIELD KENNEL.

Valuable English Gordon setter and pointer pups. The first of their imported stock offered for sale.

Peny-Lily English setter pups, black, white and tan; very handsome; six bitches and one dog; whelped May 24, 1890.

Imported Rhodora, own brother to Count Wude III. Imported Norma English setter pups, two dogs and one bitch; black, white and tan; just had distemper; whelped April 18th, 1890.

Bob (champion imported), Imported champion Mona (Gordon setter); six dogs and three bitches; very handsome; rich black and tan, no white; whelped June 24.

Donaud imported; Imported Belle (own sister to Bow Belle); pointers; three dogs and two bitches; all liver and white; very evenly marked; whelped both of March. For further particulars and price apply to Captain Blake, Kennel Manager, General Wayne P. O., Montgomery County, Penn.

The Kennel.

Imperial Kennel

Setters and Pointers thoroughly Field Broken. Young Dogs handled with skill and judgment. Dogs have daily access to salt water.

N. B.—Setter and Pointer puppies; also, broken dogs for sale; full pedigree. Address H. C. GLOVER, Toms River, N. J.

FOR SALE—Three handsome red Irish setter pups, eight weeks old, large, strong and healthy, out of Nora, she by champion York Beller and one brace of handsome Llewellyn pups out of Belle, she by Pride of the Border x Kirby and Warwick, both parents being thoroughly broken and prize winners. Prices reasonable. For particulars and full pedigrees, inquire of the CONESTOGA KENNEL, 108 West Orange street, Lancaster, Pa. June 17th

RORY O'MORE KENNEL.—Champion R. O'More in the stud. The handsomest, as well as one of the best field and best bred red Irish dogs in the United States. Winner of first prize at New York, 1877; champion at New York, 1879; champion at Hudson, 1879, and winner of the gold necklace at New York, 1880. For sale, thoroughbred pups. Address W. N. CALLEN, 108 West Orange street, Albany, N. Y. June 24th

LACHINE KENNELS.

I HAVE moved my kennel of cockers to the vicinity of New York. Will have no pups before October. Cora, Firt, Malcap, all to be bred below, this week. June 21st

GEO. D. MACDOUGALL, P. O. Drawer 432, June 24th

E. B. GOLDSMITH,

Custom House and Forwarding Agent, 58 WALL STREET, NEW YORK.

RECEIVES AND FORWARDS Dogs, Rabbits, etc., to any destination. Kennel Clubs, Sportsmen and others, intending to import dogs from Europe, should have their stock consigned to him, as the information furnished in regard to the best methods of importing, shipping, etc.

PINE LODGE KENNELS.—I am prepared to take a limited number of dogs, either setters or pointers, and train them thoroughly. I give my puppies seven months' work out of the twelve, and guarantee satisfaction. If the dog has all the natural instincts, I let them loose on application. Prices, \$50 and \$75, according to length of time I keep the dog, with discount to parties at long distances. A. WINTER, Cairo, Thomas County, Georgia. Oct 24th

WANTED.—One or two dogs to train for Field Trials. M. VON CULIN, Delaware City, Del. June 24th

K 9 KENNELS.

BREAKING, breeding, boarding. Large stream on the place, and daily access. Best feed and care. Terms easy. Inclose stamp. My dog—K 9 Mandy Curd, 20 lbs.; K 9 Wormy, 30 lbs.; K 9 Flap Powder, 30 lbs.; K 9 Soap, 25 lbs. Kennels one mile from Dover, Del. Address E. & C. VON CULIN, Dover, Del. P. O. Box 218. June 24th

SETTERS FOR SALE.

Out of my bitch Maud (Fancy-France), an orange and white ticked dog, by a very nice native dog. He is thoroughly broken and is staunch, strong, handsome and has a fine nose; price \$75. Also a very handsome orange and white bitch, out of my dog by Hanger II; well yard bred and has a fine nose; price \$75. These pups are very bright, quick and intelligent. Price \$15 each. The parents of these dogs are all well known as fine bred and fine working dogs, most of them being champions. Great care has been taken in breeding all of my dogs, and they are very easily broken. Address G. E. OSBORN, New Haven, Conn. Aug 19th

FOR SALE—Two very fine for terriers out of Nettie and Vaudin; ten months old and very handsome. Price \$15 each. Address J. B. WATSON, 40 Myer street, Boston, Mass. Sept 24th

The Kennel.

Cathery's Dog Soap,

PRIZE MEDAL.



C. CATHY LONDON.

FOR WASHING ALL KINDS OF DOGS. Will destroy fleas, cleanse the skin and hair from scurf and smelly, making the coat lie flat and glossy, without giving the dog the least harm to the animal, and safely and effectively cure the mange.

PRICE, 50 CENTS. FOR SALE BY ALL DRUGGISTS. Wholesale Agents, MCKESSON & ROBBINS, NEW YORK.

Sample Cake sent on receipt of 50 cents. July 6-23.

FLEAS!

USE DR. AL. WATTS' FLEA SOAP, a safe and efficacious remedy and preventive for fleas and all eruptions of the skin produced by them. It cleanses the hair of all impurities, purges it of all disagreeable odor, and possesses the most thorough disinfecting properties. It is impossible for fleas to live where it is used. Price, 25 cents per cake. For sale by all druggists. Wholesale depot, 164 Lincoln street, Boston.

Dr. Watts offers for sale the largest assortment in America of dogs of all breeds. All diseases of dogs skillfully treated. Medicines with full instruction, sent to any address upon receipt of one dollar. The fact that Dr. Watts has for four consecutive years and by appointment the position of Special Officer of the City of Boston to have charge of unlicensed dogs, is sufficient guarantee of reliability. All communications and orders will receive prompt attention. Address DR. AL. WATTS, Mar 25th 164 Lincoln street, Boston, Mass.

A RARE CHANCE.—For sale, English A setters; Don, a splendid large orange white ticked dog, brother to Champion France, but superior every way; \$50; Moll, a very beautiful bitch, orange white, black points, two first prizes, \$75; Dick, a very fine dog, orange white black points; Russ II, orange white ticked, second prize; she with Dick, \$100; the best brace ever shot over. These orange white ticked dogs, twelve months old, very fine, full of hunt, \$20 each; also puppies ten months old, Gordon and Laverack combined. Bob, black, white and blue ticked; Jim, black white tan, \$15 each. A brace, black and white, well matched, \$25. A black white tan, 1 year, five months old, \$10. Puppies two months old, out of Russ II, by Don, orange white ticked, a brace for \$10 if taken by July 1st. They cannot be beaten for looks and natural field qualities. This is a chance you cannot afford to lose if you want the stock for very little money. Address ASA L. SHERWOOD, Skaneateles, N. Y. June 24th.

FOR SALE—CHEAP. Red Irish setter pups, out of my bitch Dell, she by champion Rufus, out of J. W. Heikerton's Belle by K. M. Colgate's Pat, he by champion Elcho, out of H. H. Heile II, by Dr. Strachan's Dan II., out of same owner's Belle. The puppy shows signs of being an extra fine field dog, is very handsome, and in good condition. Address X. Y. Z., this office. Aug 24th

FOR SALE—A number of well broken pointers and setters. H. B. RICHMOND, Lakeland, Mass. Aug 19th.

PEDIGREES.—For samples and prices send two three cent stamps to M. Von CULIN. (See above.) June 24th

FOR SALE—A red setter dog puppy, ten months old, by Rake, out of Belle II. Rake by Dr. Gautier's Dan and Laverack's Ruby. Belle II, by Dr. Strachan's Dan II., out of same owner's Belle. The puppy shows signs of being an extra fine field dog, is very handsome, and in good condition. Address X. Y. Z., this office. June 24th

The Kennel.

THE BLUE STAR KENNEL OR THE COCKER SPANIEL BREEDING KENNEL

OF M. P. MCKOON, FRANKLIN, DEL. CO. N. Y. I KEEP ONLY COCKERS of the finest strains. I sell only young stock. I guarantee satisfaction and safe delivery to every customer. These beautiful and intelligent dogs cannot be beaten for ruled grouse and woodcock shooting and retrieving. Correspondents enclosing stamp will get printed pedigrees, circulars, testimonials etc.

MICKE'S

Never Failing Dog Distemper Cure and Flea Destroyer.

For sale by all Druggists at 25 Cents each.

Wholesale Agents—Charles L. Ritzman, 93, Broadway, N. Y.; Bruen & Holart, 14 Fulton street, N. Y.; Smith, Kline & Co., 309 N. Third street, Philadelphia; Finley Thompson, 35 Magazine street, New Orleans; Lar W. H. Holstard, Valparaiso, Ind.; Trimble & Kleibacker, Baltimore. Cure or Destroyer sent by mail on receipt of 50 cts. L. A. MCKE, Easton, Pa.

NEVERSINK LODGE KENNELS.

IN THE STUD.—Rough-coated St. Bertrami, "Marco," Newfoundland, "Keeper," pointer, "Croxthead," Blue Belton, "Declian," Irish setter, "Rover II," and to season puppies for sale out of St. Bernard "Braunfels," champion pointer "Queen," champion Gordon "Beauty," Blue Belton, "Silk," Irish setter, "Moya" and "Biddy," cocker "Flirt," collies "Mud" and "Lassie." Besides puppies, I have for sale yard and field broken dogs. Write for full pedigree and catalogue to A. E. GODEFROY, Guyard, Montgomery County, N. Y.

IN THE STUD.

The imported pure Laverack setter, "ALDRERSHOT," Color, lemon Belton; whelped September 11th and has been thoroughly broken.

For particulars, address EIDMAN A. HENZBERG, 1404 Pacific street, Brooklyn, L. I. Post office address, BOX 3910, New York City.

OUTBOUR KENNELS.—For pure Cocker spaniels of all ages—also in the stud, pure cocker Skip II, liver and white, flat-coated, line feather; will serve bitches at \$10; bitches guaranteed. Address ROBERT WALKER, Keeper Outbourn Kennels, Franklin, Del. Co., N. Y.

Dr. Gordon Stables, R. N.

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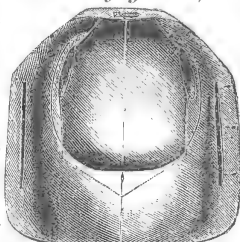
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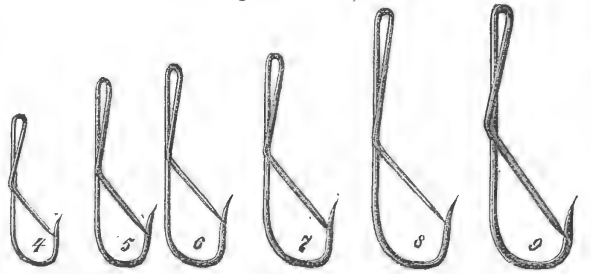
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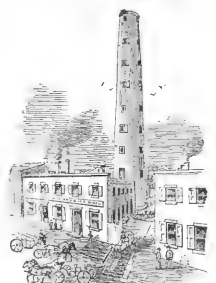
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ROD & GUN

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NEW YORK, THURSDAY, SEPT. 9, 1880.

Volume 15.—No. 6.
Nos. 39 and 40 Park Row, New York.

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FOREST & STREAM.

NEW YORK, THURSDAY, SEPTEMBER 9, 1880.

THE TILESTON MEMORIAL FUND.

NEW YORK, Sept. 3d.

Editor Forest and Stream:—
I have acknowledged the receipt to date of further subscriptions to the "Tileston Memorial Fund" as follows:—
Previously acknowledged, \$550 00
A. S. Smith, through Fox, DuBois Wagstaff, \$5 00
EST AND STREAM, 5 00
A Friend, 5 00
Total, \$610 00

At a meeting of the committee, it was decided to close the fund on Oct. 5th.

We have received this late date as our treasurer (Mr. Morris) has received notification from several clubs that they would send us subscriptions after the regular meetings, which take place this month, and we trust all parties who are making collections will send them in as soon as possible. Yours truly,

FRED. N. HALL, Secretary.

THE PENNSYLVANIA STATE TRIALS.—We had a very pleasant call this week from Mr. Theodore Morford, who expressed his regret that he had been obliged to decline the honor of serving as one of the judges at the Pennsylvania State Field Trials in November, he having previously arranged to officiate at Vincennes, Ind., for the National American Kennel Club's Field Trials, which occur on almost the same date.

—The present number of the FOREST AND STREAM is of special interest to anglers. Our next issue will be equally rich in material of great value to the shooting fraternity.

—We conclude to-day the publication of "English Dogges," a book which certainly deserves a place among the curiosities of sporting literature. Those who desire the work in more convenient form may secure the book by writing to "The Bazaar," 170 Strand, W. C., London.

THE TURBOT AND SOLE IN AMERICA.

A PHILADELPHIA gentleman is trying, through the newspapers, to revive the long obsolete belief that the turbot and sole of Europe occur on our coast. Although he has never seen them himself, and fails to bring forward evidence that any one else has seen them, he insists that they occur in the greatest abundance in New Jersey, particularly in the vicinity of Atlantic City, "and doubtless all along the Atlantic coast, from Portsmouth, N. H., to Wilmington, S. C." (sic). He upbraids the American public for their incredulity, though this does not surprise him so much when he calls to mind that "our Government Fish Commissioner has actually contemplated sending a steamer to English waters to procure turbot-sole to plant along our shores." He would not be surprised if incredulity were to continue longer "under such official indorsement." He accounts for the ignorance regarding them by the theory that the English trawl-net is unknown in America, and that our fishermen would not know how to catch such fish if they were aware of their presence, and have not become aware of their presence because they have no means of catching them. He intimates that he is preparing to form a company for the purpose of developing a turbot fishery upon our coast; an enterprise "in which but little will be risked and the results will be a surprise to all." He closes one of his letters to a New York journal with the following appeal: "I trust that you will not let this question subside, but persevere in calling attention to it until we do away with the extraordinary anomaly of this enlightened nation being within reach of treasure that for more than a century they have been unaware of, and have remained persistently blind to."

All this is very entertaining, and furnishes a neat text for a few remarks on the history of this belief as well as an opportunity for demonstrating to the public a fact which has for forty years or more been known to ichthyologists, that the turbot and the sole never have been seen on the Western side of the Atlantic, and never will be, unless they are introduced by artificial means.

From the beginning to the end we encounter the well-known source of confusion—the giving of old world names to species which resemble in a general way the old world species which bear them, and the unquestioning acceptance of these names as authoritative by persons who are not trained to close discrimination.

When Boston was occupied by the British during the revolutionary war, the officers of the fleet are said to have been bountifully supplied with turbot which were caught in the neighborhood of an outer harbor. This fact is recorded by Dr. J. B. C. Smith, in his Natural History of the Fisheries of Massachusetts (Boston, 1833), on the authority of William Ladd, Esq., Maine. He also mentions "a statement of Mr. Parker, the conductor of the Marine Telegraph," who told him that "many years before, Admiral Sir Isaac Coffin brought out to this country a trawl-net, such as are used on the coast of Holland, for taking sole for the London markets, with which he succeeded in capturing that delightful fish in Ipswich Bay, which was not before supposed to exist here." The fish found in this manner were no doubt the common flat fishes of Massachusetts Bay. The common flounder *Pseudorhombus dentatus*, taken in Provincetown water, where it is commonly called "plaice," was in 1840 sold in Boston under the name "turbot." Capt. Mackinnon, of the Royal Navy, who visited this country in 1850, conceived the idea that turbot ought to be found on the shores of the United States, and took pains to search for them with a trawl-net. The net which he used has been reported ten years before by Mr. Nathan Smith, an American gentleman, who had hoped to introduce them, but had never used them. Capt. Mackinnon tried the net at Newport, R. I., and succeeded in taking a number of different kinds of flat fish. He carefully refrains, however, from pronouncing any one of them to be identical with the turbot or the sole, though from the vagueness of his language it is evident that his ichthyological knowledge was very scanty, and that he was not accustomed to observe the differences between the different species of

fishes which somewhat resemble each other. His experiences are described at length in his book of travels, entitled "Atlantic and Trans-Atlantic Sketches, Afloat and Ashore," (Harper & Bros., New York, 1852, pp. 166–1 0', Capt. C. C. Churchill, U. S. A., who saw the results of Capt. Mackinnon's experiment, tells us that the fish taken were the common species of New England flat fishes and flounders.

We fancy that the inspiration of the new advocate of the turbot-in-America question, as well as the information upon which he bases his conclusions, were drawn from this very same book of Capt. Mackinnon, for he uses many of the same phrases, and he repeats in almost the same words Capt. Mackinnon's statement: "The fish markets in America are not at all in keeping with the size and wealth of the cities." A statement which, however true it may have been thirty years ago, will be amusing to any one who has recently had opportunity to compare the fish markets of America and Europe. The Philadelphia gentleman sums up his evidence as follows: "The turbot, sole and plaice are, however, in abundance in your deep water sand banks. They were caught there in 1812 by English sailors, and in 1880 turbot have been obtained off Atlantic City, if the *Baltimore American* is any authority."

The notion that the introduction of the English trawl in America would be novel and would at once open up a field for a fishery industry of boundless extent, deserves a word. The trawl has been assiduously used by the summer collecting party of the United States Fish Commission for ten years past, and also by Prof. Agassiz upon various exploring trips. The steamers of the fish commission have used it on every portion of the New England coast, and as far north as Halifax. Prof. Agassiz has used it in the Gulf of Mexico and on the coast of Florida, and during the present summer, while on the coast survey steamer *Bache*, has employed it in running five lines of research at right angles to the coast from Cape Hatteras at points nearly equidistant between Charleston and Cape Cod, one of them directly out from the entrance to Delaware Bay. These lines were carried from near the shore to a depth of twelve hundred fathoms or more.

In 1854 Prof. Baird made a careful exploration of the coast of New Jersey with a special reference to the fishes, and since that time every stretch of coast line from Brownsville, Texas, to Eastport, Maine, has been thoroughly investigated by the officers of the United States Fish Commission. It is true that a new species of fish is occasionally discovered, but the new fishes always belong to one or two classes. These are either swift-swimming species, members of the West India fauna, which come upon our northern shores in summer, or they are inhabitants of waters more than six hundred feet deep which had never previously been explored. The turbot and the sole are shallow water species, and had they occurred in our waters would have been discovered many years ago.

There are thirteen species of flat fishes on the eastern coast of the United States. Two of these belong to the same family with the sole, but are utterly worthless as articles of food. The nearest relative of the sole is often called the American sole (*Achirus lineatus*), and is known on the coast of New Jersey as the "hog-choker," "cover-clip," or "cover." Of the eleven flat fishes, only two are positively unfit for food, and these two, strangely enough, are the representatives of the sub family (*Rhombinus*) to which belong the turbot and brill of Europe. One of these (*Lophopsetta maculata*) is sometimes called the "spotted turbot," and in New Jersey is called "window-pane" or "daylight," because it is so thin that when held to the light the sun can be seen through its translucent flesh. The most important flat fish is the halibut, which is identical with that of Europe. This species and the pole flounder, which has recently been brought to light in our waters by the Fish Commission, are the only two of the thirteen referred to that are found on both sides of the Atlantic. We have in our waters an abundance of flat fish, some of which, for instance, the common flounder of the New York market, *Pseudorhombus dentatus*, are probably fully equal to the turbot for food

uses. In fact it may be had in the New York restaurants and hotels under this name. Another fish, *Platyomathichthys hippoglossoides*, resembling the turbot in flavor, is sometimes brought to New York in winter. It is found at great depths on the coast of Newfoundland, and is often called the "American" or the "Newfoundland Turbot." The pole flounder is very similar to the sole in flavor and in the texture of its flesh, but it unfortunately inhabits somewhat inaccessible localities at great depths, and it is hardly to be expected that, with the present supply of excellent food-fish to be obtained at so much smaller expense, our fishermen will take the pains to go in search of them. That the popular taste for flat fish is already well cultivated, is shown by the fact that in 1879 1,796,000 pounds were sold in New York alone.

It is needless to refer to the efforts of the United States Fish Commission to introduce sole; they are familiar to all who are interested in the subject. The introduction of the trawl-net has been for many years under consideration, but this expensive mode of fishing does not seem to be required at present, since the supply of fine flavored food-fishes is more than equal to the demand. With an eye to the interests of the American fisherman, Prof. Baird has recently detailed an attaché of the Fish Commission, one of the most experienced fishermen of Massachusetts, to study the trawl fishery in the German Ocean, and his report will soon be published.

Finally, it may not be amiss to state that Mr. E. G. Blackford, of Fulton Market, New York, has for some time been authorized by the Commissioner of Fisheries to pay twenty-five dollars to any one who should present a true turbot or a true sole caught on this coast. This offer is still standing, and our Philadelphia friend may thus obtain fifty dollars of his required capital by capturing a specimen of each and calling upon Mr. Blackford, which we hope he will do before he addresses the public again upon a question which he does not understand.

FISH IN SEASON.

SO many inquiries have lately appeared concerning our published list of fishes in season, and our changes in the scientific nomenclature of some of them, that we have given the list a thorough revision, and invite criticism upon it. We deem it necessary at this time to go over the list of common names and make some explanations, lest anglers who use another name for one of them may think their favorite fish is left out. Beginning at the top with those known to have an alias, we will say of the lake trout that this is also called salmon trout, a name applied to several fishes. Pickerel (a diminutive of pike)—this fish is known in the Eastern States by this name, and is not found except in the Atlantic streams and the lakes. Pike—by this is meant the great pike, so called in Europe and America, except New York, where it is confounded with the smaller one above. Pike perch is the misnamed "salmon" of the Susquehanna, Mississippi, Ohio and other Western and Southern rivers, the *Lucioperca* of Cuvier and angling authors, the wall-eyed pike of New York. Yellow perch is the barred perch, raccoon ch, etc., of the South.

Striped bass—the rockfish or rock of Philadelphia and the South. White bass is the striped lake bass of the Great Lakes and upper Mississippi. Rock bass is also called red-eye and black sunfish in different localities; there are two species, *A. rupestris* and *A. cavifrons*; the common name seems to be applied to other fishes. They are called black bass in some places, because they are really blacker than the fish usually so-called. Warmouth—a fish somewhat resembling the above, found in the Southern States. Crappie—the grass bass, strawberry bass, chinkapin perch, speckled hen, etc. Batchelor—so-called in Ohio, the newlight of Kentucky, and crappie or croppie of the lower Mississippi. Chub—only the large cyprinoid, growing to half a pound weight, is meant; it is also called fall fish.

In the salt water list the porgie is the scup of Massachusetts and the East. Tautog is the blackfish of New York. Sea trout, or salt water trout, is the name given to what is known as Southern weakfish in the New York market. Weakfish is the squetague of the East and the salt water trout of Washington and the South. Bluefish is called taylor south of New Jersey, and snapping mackerel when young; called also horse mackerel. Kingfish—called barb in New Jersey and whiting South.

It will be seen that it is no easy task to know what fishes are meant by writers of different sections, who often use one name for different fishes, or have many names for the same species. Nor is it easy for us, cosmopolitan as we are, to select a common name for some of them which have many. In making our list we have been guided by general usage as obtains in the great markets, except in the case of pickerel for the great pike, which we consider a gross blunder.

—At the National Fair, to be held at Washington, Oct. 5th to 16th, three classes will be provided for the exhibition of dogs, guns and food fishes. Full provision is made for the protests of exhibitors, and the best of facilities offered for working up a national dog show *cause celebre*.

A DISGRACE TO THE RIFLE WORLD.

THAT wretched Halford-Hyde match seems destined to keep up its stench in the nostrils of riflemen for some time to come. Not content with making himself ridiculous in the eyes of all America and with a persistent stupidity rushing on to a defeat which was foreseen by all but himself, the gun-agent author of that match has now turned letter writer, and cropping up here and there are explanations, extenuations and lame apologies for his disgraceful defeat. There is not enough sportsman about him to say with a manly frankness: "I am beaten, better luck next time." He will not give the British team the credit for the fair, square set-back which they seem to have given him, but instead a black streak of the match is dragging its slow length along in the daily press, while Mr. Hyde is gradually entangling himself in the web of his own excuses. The fact simply is, that by hook or crook he succeeded in inveigling a number of good shots into his company, and when pitted against the British team he and they were ignominiously beaten. The why and wherefore is plain to any but the most prejudiced and blinded apprehension. The team was woefully mismanaged, and as a consequence defeat came upon it. All of this could be endured. It might be explained as the error of overenthousiasm, that the manager of the match, overconfident in the ability of the American riflemen, had miscalculated and had forgotten that even the fleetest runner may stumble and fall. For the vileness of the letter-writing sequel no such excuse can be offered. The letters thus far written are more spiteful attempts at retaliation like that of a "whipped cur" who turns and snarls at those who will not stop and caress it.

To come to particulars, in one of his explanatory letters, Hyde says of a member of the genuine American team:—

Dentist Clark is, in a great measure, responsible for the defeat. He was one of the original team, pledged to it long before the first match was thought of, as I have his letters to show, and was, in fact, the only one of all the riflemen of America who came to me and asked for a chance to shoot in this match. He pledged himself anew at Dublin, after the first match, and up to the day before the match we had every expectation he would shoot. Then we learned that he, passing in sight of Wimbledon without visiting it (fancy a genuine rifleman doing that) had turned tail, like a whipped cur, and fled to America with his master.

And again, in another letter, he speaks of the same gentleman:—

It was this opposition, coupled, perhaps, with a glowing prospect of being "received" at New York with Col. Bodine, that caused Clark to run away, and it was his non-appearance unquestionably that caused Farrow's defection, as this leaving a sinking ship; either that, or the explanation is to be found in the fact that the betting was two to one on the American team up to the morning of the match. His nominal excuse was that he had been unjustly deprived of a barrel of his favorite tipple. It is fair to assume that had Clark remained, Farrow would not have sold out or deserted—whichever it was—and that they would have made the average of the other six 232, and that their help to the others, and the absence of any "squabble," would have added five points per man all around, and consequently have won the match.

Messrs. Farrow and Clark were free to act as they chose in the matter, but preferred taking their counsel from the members of the National Rifle Association. It is, indeed, poor logic to say that had the membership been stronger than it was, the team had never been beaten. That goes without saying. The team was strong enough to do better work, and but for its wretched handling it would have made a more creditable showing.

The hints and slurs in the above quotation are beneath notice, and should have their proper effect in barring their author from every rifle range in America. The gambling explanation of the absence of Mr. Farrow may be a reflex from the mind of the writer. This certainly is a fair view to take of it, when the facts of this match and the utterances of the letters are brought together.

TWENTY-THREE MILES AN HOUR.—This is in round numbers the speed attained by a new torpedo launch, of only sixty feet in length, just completed for the Russian government, particulars of which will be found in another column. We have all along held that under the Herreshoff system a higher rate of speed could be obtained than from any other practice, and the successful trial of the new launch substantiates the correctness of our views. With their wonderful light but tough hulls, their light and efficient coil boiler, and the matchless proportions of their engines, it would not be astonishing to see full twenty-five miles an hour turned out from the famous Bristol yard before another year rolls around.

PROFESSOR JORDAN.—We are pleased to hear that Prof. D. L. Jordan, the able ichthyologist and Assistant of the United States Fish Commission, has returned from his labors on the Pacific coast, and is once more at his home engaged in his long promised synopsis of salt water fishes, which was begun some two years ago, but postponed on account of a pressure of other work. He has added greatly to the knowledge of the fishes of the Pacific coast within the past year, and has sent several tons of new species to the Smithsonian Institution.

FROM THE WATER TO THE FIRE.

HE was a famous fellow, as well known to the frequenters of the streams as any of the most prominent landmarks upon it, and right merrily had he led the dance for more than one angler. He was no unsophisticated trout, but a consummate master of foraging and skirmishing, and for cunningness and resources a worthy compeer of the heathen Chinese, and although he had had many a narrow escape to recount to his companions he had so far managed to free himself from the most intricate meshes into which his appetite had lured him. More than one leader with its cast of flies had disappeared in that whirling eddy. He was the hero of many an evening yarn spun by the camp fire, and although never more than a momentary glimpse had ever been seen of him his weight was known to an ounce.

The pool where he made his headquarters was chosen with the skill of a military engineer, inasmuch as it was a natural fortification. On one side where the water was blackest and portentous of unknown depths was a precipitous bank, up or down which no one could climb with his fishing tackle in fighting order. The opposite side, a dense mass of fallen trees, the branches of which reached half way across the stream and furnished convenient hitching posts, around which his troutship could wind a leader and escape at his leisure. The water whirled to the left and fretted itself into foam-capped disorder and broke its head against some boulders and then quietly went to slumber in the black pool below. This fish lay on the edge of the swirl and could only be reached from above, and if reached he had invariably unmuzzled himself by managing to effect a junction with the fallen tree tops. His first rush after feeling the hook had always been in that direction, and how to prevent it without taking an unfair advantage of him was a puzzle, but there was an avenging Nemesis on his track who was destined to solve the problem.

A leader of extra strength was rigged with two yellow professors and a Montreal fly, and at the third cast the middle fly, a professor, was fast to the old grandee of the pool. A silvery streak flashed in the sunlight, flashed but an instant as he made his first break, and was away like an arrow toward his old allies, the tree tops, the rapid current adding momentum to his run and making the reel fairly hum. He was an incandescent desperado. The manner of his leave-taking proved it. A fellow less in earnest, with less demoniacal energy, would have given up and made no flurry about it. Not so this one. His preliminary rush was whizz-z-z-z, and it was merely supplementary to the other maneuvers he displayed before we were on speaking terms. Whizz-z-z-z! the most exhilarating music that ever tickled the tympanum. There was a commotion all around that vicinity. Away he went as though he had forgotten something. He's the Old Scratch himself let loose. A nervous man would say better unhitch an African simoon or a North American tornado. But the elastic rod, steady and unrelenting, snubbed him smartly as he headed for the tree-tops and checked every rush in the nick of time.

That particular trout was fenced in; in fact, cornered. He had never before entered into a speculation in which the profit promised so small a return for his investment. He would willingly have settled for ninety-nine cents on the dollar, but his principal creditor was inexorable in his demands, and would accede only to a settlement in full.

Great Scott! but he fights just as a man does when he is driven into a corner and knows he must strike heavy and quick or take a "licking," and perhaps get it anyhow." Inch by inch, foot by foot, he comes. Now the landing net; so-o-o-o. Oh, Piscator! by all the powers, well done! My eyes, what a beauty—purple, silver and gold—resplendent as a tropical sunset; weight, four pounds fifteen ounces. We might call him an even five pounder, but that would be lying for an ounce, and we are no light-weight liars.

What a splendid fellow he is, to be sure, considered aesthetically. The stream, from its source to its debouchment, contains no finer. The pulse-tingling excitement you have just experienced speaks of his prowess, and to-night's supper will tell of his succulent obesity, fit for the palate of Sardanapalus, or for the gullet of the most fastidious tramp that ever tapped at the kitchen door.

What an ignoble end of a happy life! Brought up in the purest surroundings, with never a care to trouble, all wants lavishly supplied, growing more and more beautiful as the seasons advance, until he develops into that prince of swimming things, the perfect trout, and then in his overweening confidence in his own prowess the bubble of his pride is pricked; he falls from his high estate, and ends by sizzling on a broiler. MILLARD.

THE CREEDMOOR FALL MEETING.—By the date of our next issue the range at Creedmoor will be in active use with the matches of the eighth annual fall meeting. Already there is prospect of a good attendance of marksmen, while by teams a large number of organizations will be represented. The regular army is coming for-

The Sportsman Tourist.

SNOEK FISHING IN TABLE BAY.

BY E. B. BIGGAR.

THE glorious Southern Cross gleams brightly from above the broad top of Table Mountain and there is scarcely a sign of dawn as the rumbling of boat-ours announces that the fishermen of Capetown are beginning their day's toils. If the reader will, let him accompany me with one of the snook boats that are now preparing to enter the waters of Table Bay. The fishermen whom I ask for permission to go with them cheerfully grant the request. They are not the tall, light-haired, wiry-looking men to be found on the Atlantic Coast of America, but the dark and dreamy fisher of the Eastern seas, with such Oriental names as Abdol, Apollis and Makmoot.

Our boat issues from a little, narrow-beached, ill-served cove, called Rogge Bay, sheltered by a primitive pier at the foot of the leading street in Capetown. The coarse, low-toned, booming voice of some boat-hand echoes strangely against the silent town and over the bay as we move off over its silent surface, boat by boat, like some black specters over a sea of death. On my remarking at the stillness of the broad bay, the fishermen hint that before we are ashore we will have enough of an opposite extreme. Passing out slowly from the gloom of the grand old harbor, we glide at length behind the Lion's Rump, with Robben Island stretching long and low on our right and Green Point Beach, under the Ramp, on our left, with the surf rolling solemnly on its rugged shore. The stars, which have been shining with a brilliancy unknown to the gazers of northern climes, begin to pale in the dawn and day hastily approaches, glorified in tints which I cannot attempt to picture with pen. The slightest haze is all there appears to be of fog over sea or land this morning—for clear air is the wonderful feature of these latitudes—and the temperature, which at first was only moderately cool, is soon quite genial. In the broad day I can now tell you what my crew are like while they are settling themselves to work. Abdol is a middle-statured, sack-coated, barefooted, olive-complexioned, aquiline-nosed, thin bearded and wrinkled man. He bears a name of Arabian odor and his appearance might bear out the character; but he is a Malay, the son or grandson of some slave brought from that country by the old Dutch settlers of a hundred years ago. Apollis is hardly the gentlemanly, well-dressed, well-dressed, ready-fancied, but a stout-bodied, big, barefooted man, with a face like the "full rounded moon" in shape, but densely eclipsed and swelled as by the refractive effects of a dim horizon. As a peculiar savor hints, this exaggeration is produced by the excessive use of Cape beer. Possibly from the same cause his voice is hoarse and coarse. Apollis is an African—one of his parents from Zanzibar, the other a Cape negro. Makmoot—well, his nationality is a moot question. He is dark in color, though not black. He has a native of Arabic pronunciation, speaks the Dutch language, wears English clothes and an African countenance, professes the Mohammedan religion, keeps the Christian Sabbath and sends his children to Sunday-school, yet is known as a Malay.

Makmoot lifts his coil of line, and fixing the bait to his trolling hook, tosses it over the side. We are now about half a mile off from shore, between those beautiful mountains of Lion's Rump and Lion's Head, and are making toward the Cape. The breeze is not favorable for trolling for the Providence (with an *r*) hardly moves under her small sparker. Yet the line has scarcely been dropped in the water before it is jerked taut. Apollis in the meanwhile pulls a small baton from beneath a thwart and hands it to Makmoot.

"What is he going to do with the club?"

"Master wait—see," replies Abdol, who, I should remark, is the commander and owner of this craft, allowing certain shares of the day's take to each of his mates. He took me a minute to explain the use of the baton. Makmoot, hauling the fish with gleeful alacrity out of the water, gives it a toss which lands it high and close under his left arm. It is hardly lodged in this position before the baton is swung around and brought down with charming dexterity on the fish's nose. A twist of the hook from its mouth and the victim is dropped into the boat kicking its last. Thus the process was accomplished. But it was performed so quickly that, like the premier trick in a magician's performance, I wanted to see it again. And again. The fish which lies in the bottom of the boat is one of the most plentiful of the many remarkable varieties to be found in Table Bay and around the Cape peninsula to False Bay and Simon's Bay. It is about two feet long, but Abdol informs me that it is a very small specimen and we are yet to catch them three feet or three and a half in length. It is long-nosed, tapering from jaw to nozzle in lines as regular almost as an isosceles triangle; it is scaleless, its skin being salmon-like in color, dark on the back, but its sides and belly, its body is not broad between back and belly, but well rounded and very supple. With ample tail its speed in swimming is very great. This quality is a matter of necessity in its existence, for it is one of the most voracious of fishes. Darting like a meteor on all sorts of small fry of edible kind, it is equally at home in grovelling and glutting in the filth and sewage that flows into the bay from Capetown. The Dutch name given to it signifies its character. As I have already eaten it, I know that, whereas its appearance is flesh is excellent, it is of grain; but, except during a short season in winter containing but little oil. When smoked, its flavor is simply delicious, and though now chiefly appreciated only within the Colony, the time may come when the smoked snook will be esteemed abroad equally with the very daintiest of fish. But more on the trade aspect when we get ashore, for Abdol now offers me charge of the helm and sheet, and all three are settling to work. Makmoot tosses out his line some distance and again is soon hauling in a fish. Springing it under his arm, the baton comes down on the poor thing's nose, and the hook withdrawn, it is thrown into the bottom of the boat. Abdol throws out his line, but with the grace and air of a man who understands every point in the whole nature of a snook evidently. Two or three deft hand-over-hand draws and up the fish flies like a bird, lighting under his armpit as if it had voluntarily leaped into its own native place; yet goes the baton and down goes the snook. How easy I yet how much like a trick of legerdemain. I watched

again. Apollis, with less skill and no small bluster, hauls away, causing the boat to lurch, and dealing his victim a fearful blow, throws him down with savage strength, in wide and not interesting contrast to the polished style of Abdol, who now again unconscious of his high art adds another to the number in the boat. A gently stiffening breeze from seaward increases our rate of speed and attracts the fish in quicker succession. The fun is furious. The tightening line, the thrashing of the water and the thump of the club followed each other so fast that the fishers themselves laugh and congratulate each other upon the run. Evidently it is rather an unusual fortune, for after a time there is a sudden rest. I ask if it is the capricious nature of the snook, and Abdol replies by suggesting that if I will bear off again from the shore we will run faster and catch more fish, whereat Makmoot and Apollis laugh. I awake to the fact that I have unconsciously, while so intent upon the fun, allowed the boat to run up into the wind and lose way. Thus I had to pay the penalty of want of attention to my duty. However, we get under way again, and the takes are tolerably numerous, though never so lively as before. I had now watched the magic trick till I had, point by point, taken in a pretty correct idea of the whole *modus operandi*, and I said: "Abdol, hold this tiller till I try my hand."

"Master want to catch snook?"

"Yes."

I threw the line out, and it was some time before I got a bite. Then I jerked in with a style hardly so graceful as Abdol's, and after some lurching of the boat, I got him above water. Then I performed the swing under my arm; he struck the right spot exactly. I raised my club and struck my arm a blow sufficient to have stunned a whale, much less a snook. But I think must have hit the snook—somewhere about the tail perhaps. However, he fell outside the boat and shot like a gleam through the water. "There," thought I, "goes the line, hook and all." But Abdol had fortunately tied the end in the row-lock, and he was brought to a check soon enough. I hauled him up, and scorning the armpit trick, decided to dispatch him in my own way. So I got him down against the side of the boat and made a stab with the baton. The blow made an impression in one of the ribs, but none on the snook, for he was at that moment floundering over the corpses of his fellow creatures in the other end of the boat. By the time I had recovered for another effort of skill, I saw him lie still for a moment. Now, I thought, is my time, so I aimed a shot of a horribly fatal nature at his head. The baton bounded over a thwart and went whirling like a boomerang off toward the equator. This is a somewhat exaggerated account, but at all events I did not kill the snook, and Abdol, mercifully rubbing me of my revenge, lifted him up and dispatched him by a single tap. I resumed the tiller. After all—I consoled myself—snook catching is not an elevated pastime; it is only fit for the cunning sleight of some magic-working Oriental.

At about 11 o'clock our boat is about two-thirds full and Abdol considers it time to return, for a southeaster is likely to spring up. Though now a considerable distance off we make good headway in, and while we go a lunch is brought out, consisting of fried snook and bread, and is eaten with eager appetites. The crew meantime conduct their conversation in barbarous Dutch, and I fancy that the pleasantest thing the subject of the conversation is a certain incident of the day. We are running Point toward the docks of the town, a white cloud gathering in a clear sky over the brow of Table Mountain, and that is the herald of the southeaster, which even before we reach Rogge Bay is lashing the water into white caps. And now the "sport" of the day is done; if the reader wishes to hear nothing else he may stop here, but if a few facts on the business aspect of the question will interest him he may read to the end.

Preceding and following us to and from the cove was a fleet of some thirty boats, all precisely like our own in size and appearance, manned by equally well trained in race and color, and engaged in the same business. As I stand on the beach watching them come in I see every boat has, what seems to me, a profitable load, some less than half full, others loaded almost to the gunwale. Each boat is welcomed by a crowd of chattering humanity of every continent, nationality, tribe, kindred and tongue, and perhaps the least cultivated and refined of each class. The boat is pulled up and its load removed up the strand, each fish being taken by the head in removal. As I see colored servants gaily drying an occasional fish, some carefully in the same way. I saw learn the reason why the fish is killed on being caught. The flesh is not only of fine grain, but exceedingly tender, so much so that where a slight bruise has taken place the bruised part if fried after a day or so will go into meal like fine mashed potatoes. Such portions putrify sooner than others. If the fish were left to die in the boat its thrashing about would spoil the flesh, hence the process of clubbing. Along one side of the strand are rows of benches. Here stand the cleaners—some men, some women—and the facility with which they prepare a fish is admirable. From a basket on his left he lifts the fish and severs the head; then, with a careful though quick curving movement of the knife, opens out the entrails, which fall out clean and easily, and with a lightning stroke draws the knife from head to tail, and the red flesh of the snook is opened out into two broad, rich halves, and thrown into another basket, done. The baskets are then taken to the "fish kraals" or drying sheds, where, under the influence of a dry atmosphere and a warm sun, they rapidly dry, having been salted. Others are smoked dry, and these, though dearer, are becoming much esteemed, as they deserve to be. On the beach a snook will sell at two pence (four cents) to eight pence, according to the season; a dried snook at about six pence, and a smoked one at eight pence to a shilling and three pence. The supply in the sea here seems exhaustless, and the snook can be caught all the year round, though from October to January they are less in number, poor in quality, and often have white worms or grubs in the flesh. These worms are considered poisonous, though the fishermen eat the fish at this season as throughout the other parts of the year. While the market here is large, snook are caught in equally large quantities on the other side of the peninsula, in the waters of False Bay, Simon's Bay and Kalk Bay. What is done with them? Well, at one time they were considered fit food only for the poorest colored people; now they are largely consumed in the

ward with an energy quite noteworthy, and each team sent on to compete represents an amount of practice which would have been deemed extravagant five years ago. The States are also falling into line, and the New York team will find competitors from Pennsylvania, New Jersey, California, and, perhaps, several other States. Massachusetts and Connecticut should certainly come. There is a prospect of some fine, close work in the off-hand matches, where many excellent clubs will be pitted against each other. Col. Bodine, the executive officer, has been making preparation for a prompt shooting off of all competitions, and an abundance of shooting will be provided at the bulleye targets for general practice, and for the filling up of odd moments during the several days of the meeting. All who come and participate at the meeting may depend upon accurate marking and a fair opportunity to show their ability. Compared with such a meeting as that at Wimbledon, the Creedmoor gathering takes on a very modest aspect as to size and general stir, but when the records are compared the comparison is vastly in favor of the American range. In the several classes of short range, long range, and in military shooting, there is no danger that the work of this year will fall below the average. On all the smaller ranges good work has been doing, and the spirit of rivalry is strong enough to bring out the best work, independent in large measure of the prize list.

TATHAM'S TRAP SHOT.—As many of our readers may not know the new trap shot, advertised by Messrs. Tatham Brothers, it seems proper to give them a brief explanation of the new article. This shot is numbered from 7 to 10, each number being one-half size smaller than the ordinary shot of the same number. The peculiar feature of the trap shot is its almost absolute evenness of size, and it is confidently asserted that the number of pellets to the ounce will not vary more than four or five either way from the number which an ounce should contain. The manufacturers are so well satisfied that they have attained this evenness of size that they stamp upon the bags the number of pellets that there should be in each ounce, so that any one who purchases it may count it for himself and see how closely it agrees with the standard. Such a shot as this is just what should be used in gun trials, and there is no doubt that at game it will give better results than their old fashioned make.

THE IDENTIFICATION OF FISHES.—We wish to call the particular attention of those who, having never paid attention to the structure of fishes, claim to identify them, to our letter from Alaska. Here is a case which points its moral. "Piseco" is a veteran trout angler and a close observer; also has the advantage of years of contact with the first ichthyologists of the world, and has imbibed much of their lore, so much that we would prefer his judgment on a fish to that of any mere angler. Yet he was mistaken in supposing that he had found an Eastern brook trout in Alaska—a *fontinalis*—as his fish was marked so like the ones which he knew so well by sight; but he did not happen to know that the presence or absence of teeth upon the hyoid bone (the bone which supports the tongue) was an all-important factor in the diagnosis, until Dr. Bean, one of the celebrated ichthyologists of the Smithsonian Institution and the Fish Commission, came along and rectified his mistake, which he so gracefully acknowledges in his present letter.

We make this comment to show how easy it is to be mistaken, and why we are sometimes skeptical about fishes which are positively asserted to be "genuine" brook trout or black bass when we do not know the ichthyological attainments of the writer, who, by the way, is usually positive in proportion to his ignorance of structure; and the error acknowledged by "Piseco" should be treasured up by all. Having learned a new and valuable lesson himself, our accomplished Alaska correspondent wishes to enlighten his brother anglers and share his knowledge.

DICK, THE WOODCOCK.—The correspondent who writes to inquire about the tame woodcock is referred for full particulars to recent issues of FOREST AND STREAM. Better than reading about the bird is seeing him, and we recommend those who are interested to call on Mr. Morris at 17 Jefferson Market and see his pet. Dick will be found in the greenhouse surrounded by flowers, and with dozens of feathered companions of different kinds. His owner, in addition to his business of florist, has a number of birds, most of them native, though canaries, skylarks and other foreign song birds are to be found at his place. We noticed, during a recent visit, young robins, bluebirds, catbirds and cardinal grosbeak, all of which seemed to be doing well.

FROM THE ENDS OF THE EARTH.—THE FOREST AND STREAM draws its good things from the uttermost parts of the globe. To-day we publish letters from Alaska and from South Africa.

WILD RICE.—Wild rice may be obtained this season in good supply and quality from Richard Valentine, Janesville, Wis., and Chas. Gilchrist, of Harwood, Ont. We shall shortly publish full directions for the sowing of the cereal.

inland districts of the colony by the white classes. They are also exported interior to the Diamond Fields, to Natal and to the island of Mauritius, where they are chiefly consumed by the coolies, or East Indian laborers, who are employed on the sugar plantations of the island. They are a cheap food, and being very tender when dried or smoked, are palatable and better suited to the stomach in a warm climate, where strong meats are injurious. Such are a few notes concerning sneek catching at the Cape of Good Hope.

Cape Town, South Africa.

Natural History.

—Address all communications to "Forest and Stream Publishing Company, New York."

ANIMALS OF THE MOUNTAINS OF NORTH CAROLINA AND TENNESSEE.

Editor Forest and Stream:—

In the summer of 1858 I explored the mountains of North Carolina and Tennessee, botanizing and measuring their heights with barometers. In the March (1859) number of the *American Journal of Science* is an article from me about these mountains. As the *Journal* has a small circulation, I give the following extracts from the article: "The tedious of the night, when encamping on the mountains, is almost always enlivened by the stories of the guides of their adventures in hunting. They all positively assert that the bears in early spring, when first emerging from their winter quarters, are as fat as when they first retire for the winter. During the winter they shed the soles of their feet, which renders their walking difficult in the first spring. Then their food consists of young plants, on which diet they soon become lean, and remain so until the ripening of berries in August and September. They are very fond of hogs and pigs, pork and honey being their favorite diet. Vixen they will scratch the bark and limbs of the balsam and black spruce, I cannot tell. It cannot be for food, because they do not generally leave the marks of their teeth on a tree except in one or two places. Sometimes they rise on their hind legs and make long, deep scratches in the bark with their forepaws. It may be done for sport, or to let their companions know their whereabouts. We have seen these fresh bites and scratches on different trees during the entire warm season. The bears show great sagacity in feeding to the leeward of the paths of the mountain ridges, along which the hunter is almost obliged to travel; hence, if the wind blows, it is almost impossible to get a shot at them, their keen scent discovering the hunter long before he gets within shooting distance. They are stupid and unwary about traps, entering without fear the deep pens, which are shallow, with a depth of not more than two feet, over which is raised a very heavy top, which falls and crushes the bear when he disturbs the bait. Hundreds are caught in this manner every year. In the unfrequented parts of the mountains the large steel trap is concealed in the bear trail; but this is dangerous, and liable to catch dogs, of which we saw two caught in one morning to our great sorrow. The piteous yells of these dogs rang in our ears long afterward. The bears rarely disturb calves or young cattle, but in one locality the Smoky Mountains were told that they did much damage in killing young cattle, and that there could be no mistake about it, because a large bear had been caught in the act of killing a young steer.

"The panther, wild cat and wolf are all troublesome to the mountain farmer of these regions. The panther destroys sheep and hogs; the wild cat, lambs and pigs. Both are cowardly and cunning, and are very wary. The red squirrel (*Sciurus hudsonicus*), called mountain bunnies in North Carolina, is common in all the higher mountains. It rarely descends into the valleys. It is fond of the seeds of the balsam and black spruce (*Abies fraseri* and *nigra*), and as it is rarely molested by the hunters it is very noisy, active and fearless of man.

"We were told by a traveling fur merchant whom we met that the skins which he bought among the mountains are equal in quality and goodness to those of the North, and that Northern merchants could not tell the difference; still, in order to get the highest price, he was obliged to send his skins to New York through Ohio, via the Erie Railroad, as if they had come from the Northwest. The principal furs obtained in the southern Alleghenies are the skins of the otter, mink, black fox, red fox, raccoon and muskrat."

To the above extracts let me add that twenty years ago trout and deer were abundant in these mountains and streams; that twenty-four of their peaks are higher than Mount Washington; that they have finer and grander scenery than any other portion of the Appalachians extending northward to Canada. Also, there is another very important item in favor of the Southern mountains as a place of resort—mosquitoes and gnats are not there to torment one, as in Maine, Canada and Minnesota. The valleys are from one to three thousand feet above the sea; hence these mountains and valleys have a Northern climate. On many of the higher mountains I found species of plants which I had previously seen on Mount Washington, in New Hampshire. S. B. BUCKLEY, Austin, Texas, Aug. 16th.

Editor Forest and Stream:—

In a late number of your paper, you referred to the question of the best place for hunting bears.

On the map of North Carolina in Macon County may be observed a place called Aquone, in the western portion of the State. This little village of three or four houses, with a post-office, 2,600 feet above the sea, and seventy miles from a railroad, lies at the base of two ranges of high mountains, the Nantihela on the east, and the Valley Mountain on the west. The surrounding country, being thickly wooded and thinly settled, abounds with many varieties of game, such as bears, panthers, deer, wild turkey, etc., which are hunted only with difficulty, as the mountains are steep and lofty.

At Aquone lives Alec Mundy, a man as well known for his genial, social qualities, as for his proficiency in hunting. I have had the pleasure of enjoying Alec's hospitality on four occasions, when passing through that lonely mountain country, as he lives on the road leading

from Cleaveland, Tenn., via Ducktown, to Asheville, N. C. His favorite sport is bear hunting, and he keeps two well-trained dogs for that purpose. On the last occasion when I was there, he showed me the dogs then in his possession had assisted him in killing one of the twenty bears. Through him I became quite well posted in "bear literature." Among those mountains the bears usually "den up" early in January, and come out again about the 20th of April, when a particular plant is large enough for them to eat, with which they purge themselves. They are fat when they "den up," and are fat when they come out again, because they become poor, and remain so until autumn, when they feed on acorns and chestnuts. A fat bear soon comes "to bay," but a lean bear makes a deer and "makes" for the nearest precipice, either to ascend or descend in order to escape from the dogs. When descending, they double up and roll down. Alec says his dogs can find a bear any day in season. When they overtake one, each dog assumes his position, one on each side of the bear, which immediately turns to fight it off. No. 1 lets go contemptuously with a bite from No. 2, which lets go synchronously with another bite from No. 1. In this manner brain is entertained until Alec comes up on horseback, dismounts at some distance, then approaches quite near with his shot gun, which he prefers to a rifle. On several occasions, when a bear was wounded, it rushed at him with purposes not peaceful, and he might have been killed, but his faithful dogs, apparently knowing the danger to their master, seized the bear by the thigh, and diverted its attention long enough for Alec to reload his gun and fire again. Alec says the requirements of a good bear dog should be courage to attack, and cowardice to let go when the bear attempts to seize it. He states that a cross between a bulldog and foxhound meets the case better than any other dog he ever saw.

Trout are quite abundant in the Nantihela River, which flows past Alec Mundy's house. I have never found more trout in the Southern States in waters further south and west than in this river or its tributaries. I have heard contradictory reports of their existence in Georgia, in the headwaters of the Oconee, a branch of the Hiwassee. I think the extreme southwestern distribution of this fish is a very interesting subject for inquiry, and it could probably be determined by some of your Southern subscribers. I mean the stream where they occur naturally, as well as that where they thrive well after being transplanted. I have not found trout in North Carolina at a lower altitude than 2,000 feet above the sea. In Macon County, N. C., these fish may be found in the headwaters of the Sugar Fork Creek, 4,000 feet above the sea. This is probably the highest altitude where they may be found in the United States east of the Mississippi River.

Philadelphia, Pa.

J. W.

HERONS AND CORMORANTS.

ON the 21st day of August, the present year, I was in twenty-five miles above the mouth of the Illinois River bottom, surprised to find myself in the midst of a large nesting place of the great blue heron (*Ardea herodias*) and little white egret or snowy heron (*Ardea candidissima*) in about equal numbers, and with a few nests occupied by the two young to a nest of either the double crested cormorant (*Graculus alopophus*) or the Mexican cormorant (*G. mexicanus*). The nests occupied by all appeared to be exactly the same, and I should judge, or rather guess, that the cormorants had possessed the herons of their nests, or at least occupied an old nest from the beginning of the season, for it is hardly reasonable that birds of such very different characters would build nests exactly alike, and it is a well known fact that these nesting places and nests are used by the herons year after year. The nests were placed in the highest forks of the tallest trees.

These cormorants are known by the "boys" on the Illinois River as "nigger geese," and are quite plenty, and I had for years tried to capture one to determine their species; so I picked out the largest pair I could see—they were all standing or sitting, for they always stand up sitting down, both upright in their nests—and let go them with a very good shooting No. 12 gun—a first-class glass ball gun, and loaded for balls with 4 drachms and 15 oz. No. 8 shot—the young cormorants merely shook their heads, snapped their bills and chattered a little at this salutation. I gave them the other barrel with the same result, then both again—they appeared to enjoy the fun. I then got a little mad, took another position and gave them my best choke, and pulled the trigger very hard. I guess the one nearest to me "stubbled his toe" and fell down, but he "got right up," and sat down on his tail again. Well, I thought there must be something the matter with my gun, so I tried it on the young blue herons, which I think thought the Fourth of July had come, as they had nearly all left their nests and walked out on the dry limbs to see the fun. I let loose on the biggest one I could see, and down he came, and so did three more. By this time the old herons began to think there was trouble in camp, and came squawking in from every direction. I saluted the first one that came near, and killed him as he came down like an empty sack, and also three more twenty or thirty feet above the trees. I then concluded I would make the two young cormorants lay down or empty all my shells at them, so I climbed up on an enormous log, drew a bead on their heads, and let go, when one laid calmly down on his back in the nest and the other pitched forward and came to the ground, and the long wished for "Nigger goose" fell nine feet. He had as many as one hundred and fifty No. 8 shot in his corpus. I found his feet were about as tough as that of an old woodchuck, and thickly covered with stiff feathers and matted down, passing through his pelt and riveted on the inner side like that of a loon. I now had my bird, but how was I to find his proper name? For the information of other young students in ornithology, I will tell how I did it. If my bird had been known by any common name that Dr. Coues had heard of, I could have turned to his general index of his "Key to North American Birds," and found it, but the Doctor's early education was neglected, and he had never heard of "Nigger geese." In his "Key to the Genera," Dr. Coues groups all birds in four great groups by the number and position of their toes. My bird, I found, had four toes. I look at the Key and find "Toes

four, two in front, two behind," and "Toes four, three in front, one behind." Now my bird has four toes, all in front, so far as I can see, and what makes it worse, the four toes are firmly connected by three full webs. Have I struck a snag?

If there was a class of birds with one toe in front, two at the side and one behind, I could get along, but there was no such group. Well, there were four toes, and each of them might be called a hind toe if it did not point to the front when the bird "stood up," so I turn to Group 4, and then to Sub-group A (the hind toe elevated). Trouble arose, for I have found a hind toe. I cannot see that it is elevated, but I follow down to Sub-sub-group 1, "Feet toepalmate (all four toes webbed, hind toe semi-lateral and barely elevated (A))." So I follow down until I find A, and furnished I find all the characters of my bird in the genus *Graculus*, to which I turn, but as my bird is young and not quite full fledged or colored, I am not able to certainly determine which species of *Graculus* or cormorant it is; so, the "Nigger Goose" question must remain unsettled for the present, so far as I am concerned. But I write this to give my testimony on two facts in Natural History, to wit, that these two species in this region I have always found breeding together in the same grove, and generally with more than one nest of each on the same tree; that their nests, so far as can be observed from the ground, are exactly alike, and that a cormorant was using and rearing its young in exactly the same nests, and that all three birds had young of about the same maturity—almost full fledged, just leaving their nests on the 21st day of August, this year of 1890. I am of the opinion that they are about three years into this year. We can give facts and, too, how long is it from egg-laying until the birds leave the nests?

As a student, I thought it very strange that a bird with feet like this cormorant, with four toes completely webbed together, should habitually perch and roost on trees; so I could not believe that my young bird was a "Nigger Goose" until I got the opinion of some of our old river guides, who told me that it was a "Nigger Goose," exactly the same as "N. Geese," and all said the young was a "Nigger Goose." This bird must, when it perches on a tree, clasp its toes around the twig just as a man without thumbs would grasp.

Lacon, Ill., Aug. 24th.

BYRNE.

OWLS.

ABOUT the middle of last June I found a young screech owl in a box which I had placed high up on one of the posts of the verandah at the back part of the house, as a holding place for some wire, but they would not occupy it. The old owl had sat day after day on the brackets of the adjoining posts. This led me to get the step-ladder and look into the box. No nest was there. The bottom of the box was nearly covered with the elytra and wings of insects, mingled with the wings and feathers of small birds.

The young owl was nearly full grown, but still covered with downy feathers, which were white and yellow across its head. Its horns were prominent and composed of small feathers. When the young owl first saw me he retreated backwards to the far corner of the box, and fronting me gave vent to a hissing noise, opened and shut his jaws, looking as fierce as possible—a real conical chap. As I was about to take him in my hand he threw himself on his back and presented his claws and open mouth. I brought him down and placed him on the floor, where he still showed a gaudious disposition. His performances and appearance were so singular and amusing that I afterwards showed him to some visitors, when he was as brave as ever. His feathers came out rapidly, so much quicker than I expected that he flew away and escaped a prison cage. I intended also to shoot one of the old birds for close inspection. I saw or heard them of for several weeks, but recently I have heard them of no more.

I am not sure that these are true screech owls (*Scops asio*). They may be Western mottled owls (*Scops nathali*). They certainly make a noise at night very much like screech owls, and also resemble them in plumage.

Do the old owls carry their young from place to place for safety? No nest was in the box and but one young one. I think the other young birds were killed and this one carried to the box by the parent birds. The box was in a frequented place near the kitchen window, and the old ones would have been apt to have been seen there about when eggs were being laid and set upon, but they were only seen a short time before I saw the young one. In the winter of 1876 a snowy owl (*Nyctala nyctala*) was shot near Austin and brought to me for name.

Austin, Texas, Aug. 17th.

S. B. BUCKLEY.

COOL.—About a week since, while examining the web of a well-fed house spider of ordinary size which had stretched his net across the corner from the body of the house to the extension, and had supplied his ladder with a goodly stock of mosquitoes, moths, etc., I observed at the same time a black looking wasp come lobbing along the side wall, when all at once the spider rose to the spider's web. I thought he was caught, sure. Every half second he would kick and shake as though indeed he was entangled, but was he? We shall see. The spider was slow in responding, but after a number of shakes he darted out and attempted to secure the wasp, but no sooner had he cast a strand of his web around the foot of the wasp than the latter gave the spider a jerk, bringing the spider back to the wall. The spider then made a dash to cover himself enough to think of running he was included in the deadly embrace of the wasp, and in less than a second the latter had doubled up and had pierced the poor spider with his deadly sting a dozen times. One would suppose the web would offer some obstacle to the wasp, but not a bit; he was as much at home in the web as the spider. He took the dead spider in his mouth, deliberately crept through the web, went down the wall, and under the bottom and bore off his victim, I suppose, to fatten the young progeny of the captor.

STRAIGHT BORE.

In this connection we would refer our readers to an article entitled "The Solitary Wasps," printed on page 378 of volume XI. of this journal.

ARRIVALS AT THE ZOOLOGICAL GARDEN, CINCINNATI, UP TO SEPT. 1st.—One elk (*C. canadensis*), one llama (*Lama peruviana*), one zebu (*Bos indicus*), one yak (*Bos grunniens*), all born in garden. One passenger pigeon (*E. macroura*), hatched in garden. Two egrets (*Hierodias egretta*), one military macaw (*Aras militaris*), one bald eagle (*H. leucocephalus*) all presented. Three green monkeys (*Cercopithecus callithrix*), one vervet monkey (*C. leucoides*), two common macaque monkeys (*M. cynomolgus*), one brown capuchin (*Cebus fatuellus*), one black handed spider monkey (*Atles melanochelr*), one Indian elephant (*E. indicus*), one brown thrush (*Icthyophaga virens*), three Baltimore Orioles (*Icterus baltimore*), seven orchard Orioles (*I. spirius*), one cowbird (*Melospiza pecora*), six bobolinks (*Dolichopus orizivorus*), three yellow-headed blackbirds (*Xanthocephalus icterocephalus*), four pink breasted grosbeaks (*Guiraca pinus*), six Virginia bluebirds (*Cyanocitta cyanea*), 7 nonpareils (*C. cyba*), three Virginia cardinals (*C. virginiana*), one red-headed woodpecker (*Melanerpes erythrocephalus*), four cut-throat finches (*Ammodramus fasciatus*), six Java sparrows (*Pavida argyrea*), four zebra waxbills (*Estrildia subulana*), four amadavau finches (*Estrildia amadavau*), four red-faced weavers (*Touitid erythropus*), four orange weavers (*Euphonia frontalis*); all purchased.

FRANK J. THOMPSON, Sup't.

Fish Culture.

SOLES AGAIN BROUGHT TO AMERICA.

CAPTAIN J. H. MORTIMER, of the ship Hamilton Fish, a gentleman well known to the naturalists of Europe and America by his valuable contributions to science in many of its departments, has succeeded in bringing over some live soles and depositing them in our waters. Our readers may remember that the attempt was made in the winter of 1877-8, and only two specimens survived the change of air from the gulf stream to the "banks," and were deposited in Massachusetts Bay. (See Rep. U. S. Fish Commission, 1877, p. 867.)

In both these cases valuable assistance was rendered by Mr. Moore, of the Liverpool Museum, and Mr. C. L. Jackson, naturalist of the Southport Aquarium, in procuring the fish. The following is the report made by Captain Mortimer to Prof. Baird of his methods and the incidents of the transportation of this most valuable little fish, which is deservedly a favorite in Europe:—

When at Liverpool last March it occurred to me that my return passage to the United States would afford a favorable opportunity for the transportation of live soles across the Atlantic at that early period of the present year. The existence of ice abounding on the ordinary track would induce me to take a more southerly course, which, in connection with the more equable temperature of a middle passage, would afford a better prospect of success in my undertaking.

Communicating my intention to Mr. T. J. Moore, curator of the Derby Museum, who for years has been ever ready to assist in my attempts to transport fish, mollusks, anemones, etc., and which have been ordinarily successful, very much owing to his kindness in furnishing me material and data (all important), referring to the habits and habitat of intended companions for the voyage. Considering the habits of various fish, especially the sole, in this case I suggested to Mr. Moore that very young sole should be procured from the Mersey River fishermen and placed in the tanks of the aquarium for the purpose of acclimatizing them, as it were, to the confinement to my small globes or tanks on shipboard. While the ship remained at Liverpool this was accomplished, and on the eve of my departure for New York the number of sole obtained was only nine, the largest not being more than five inches in length. The season not being favorable for obtaining the sole, I was obliged to make up for it by procuring the sole of a lesser amount of aeration required for their well doing. I was supplied with fine gravel, coarse river sand, earth worms in sod, mussels and cockles, which I had hoped to have preserved alive for fish food.

My method of transporting these soles was in ordinary glass globes of about four gallons capacity, which, resting on a disk of wood equal to their diameters, were suspended by six cords to hooks in the carlines of my cabin where they were placed in accordance to the motion of the ship's motion, and with but very little disturbance to the water contained in them. Gravel to the depth of two inches was placed in the bottom of the globes, which were three parts filled with water from the aquarium, and three soles were placed in each tank, which were then suspended where they would swing clear of each other. During the first three days of our passage, and through the Irish Channel, my ship duties prevented me from giving much attention to the fish, but when I perceived that the water was becoming turbid, I was directed by the use of a large syringe, the use of which was subsequently abandoned in favor of a small dipping-net of coarse crash, about four inches in diameter. This would effectively aerate the water by briskly disturbing the surface, which could be accomplished in a few minutes and without disturbing the lower part of the water or the sediment.

On the fourth day out—being then at sea with an offing—I observed a turbid, milky appearance in a globe containing three of the largest fish, one of which was dead. Without loss of time I prepared a fourth globe, which I filled with ocean water brought to a density comparative with the original Mersey water by an improvised hydrometer and admixture of fresh water from the ship's tanks, and which was allowed to remain six hours until it had acquired a temperature equal to the water in the other globes; meanwhile, the fish had been removed from the impure water, and were subsequently removed to the fourth globe and new water. This accomplished, I attempted to feed them for the first time by suspending pieces of mussels and a living worm attached to a piece of fine thread. This for the purpose of withdrawing from the water the food, if not accepted by the fish, and so preventing the impurity its remaining in the globes would cause, the water in all of which was kept aerated at least every four hours, night and day, during the passage of thirty-one days.

The following morning the fish which had enjoyed a

change of water were both dead, and were afterward preserved in methylated spirits. Presuming from this fatality that the reduced seawater was not congenial to sustaining the sole, I had recourse to the original supply of Mersey River water, which, every three days, when slightly contaminated by the fish, was decanted by a siphon from one globe to another, allowing the stream from the siphon to fall some four feet through the air, carefully avoiding the sediment. This method, by decanting three times, would thoroughly re-aerate and sweeten the water, and this process was maintained for the remainder of the time the fish were on shipboard, making up the loss by wastage and evaporation by adding sea and fresh waters of as near a density as could be determined. It was observed that the sole were inclined to burrow. The gravel being rather dense for that accomplishment, I added sand that had been well washed until it would settle in a short time without clouding the water. The sole took immediate advantage of this addition, and would remain under the sand, excepting a small portion of the head, and were only distinguished by their brilliant eyes peering out of their comfortable bed, except when disturbed by the aerating process, or absence of air, when they would come to the surface and, by their splashing, advise their keeper that it was time to use his surface net or disturber. For the first few days the fish were easily alarmed by the approach of any strange object, but afterward seemed reconciled to their new habitat, and, like Dr. Tanner, lived upon air and water; for, during the whole voyage, they declined the food offered to them. Upon arriving at New York harbor I took on shore, in two globes, five of the nine soles which I had embarked, all seemingly in good condition after their long fast and the changes of temperature they had been subjected to, and, while, at one time, while passing the flow of the Arctic current, in longitude 48° west, the water temperature was as low as 34° Fahrenheit, while the mean temperature for the passage was about 50°. Mr. E. G. Blackford, at New York, took charge of the sole, which, within twenty-four hours were planted in New York Bay, just outside of Sandy Hook, care having been taken that the temperature of the water they were in was gradually brought to an equality with that of the bay water, which was much cooler.

At this writing the time of my departure is near for a voyage to the North Sea, which will prevent a repetition of my experiment, at least with the sole. But from the recent experience with them I feel satisfied that their introduction is practicable. I would suggest that they could be brought by steamers in the swinging globes, and during a passage of twelve days would need no change of water, nor food. The only labor connected with their transportation would be a simple aeration of the water, say every eight hours, and protection from the very severe and sudden changes of temperature which must occur about midway the transatlantic passage. There might also be taken into consideration the propriety, perhaps necessity, of a preserved habitat, which might be arranged for their reception, the sole being doubtless quite able to take care of himself, through his acquaintance with the habits and offensive means of his British enemies. Knowing of their extensive colonies in native waters, we may assume that they will swell up to the philosophy of the survival of the fittest. But do they know our bluish, that will swallow any moving object within the capacity of their swallowing? Does he know of the facility with which the sheephead may crush a clam, or of the affectionate embrace of the starfish? If not, he must be protected until a knowledge of the defensive means to be used are acquired by the sole. Then they will adapt themselves to the most favorable surroundings within their reach, "colonize and increase," and following such a happy result, our ichthyophagists may expect a fill of sole that may not have been sliced from a fishy flounder.

CODFISH HATCHING HAS BEEN SUCCESSFUL.

GLOUCESTER, Mass., Aug. 24th.

Editor Forest and Stream.—Inquiries among the boat-fishermen, who fish off this harbor, have brought to light some interesting facts connected with the hatching of cod (*Gadus morhua*) at this place winter before last by the United States Fish Commission. It appears that last summer, a few months after the young fish had been "set adrift" off the harbor's mouth, to seek for themselves, many were found in the harbor from an inch and a half to two inches long, presumably some of those that were hatched at the station.

This summer none have been taken in the harbor, but the fishermen report having frequently caught, just outside the harbor, a mile or so from the entrance, small cod measuring from five to seven inches in length. Sometimes as many as six or seven have been taken at one time by a single person, and this is all the more remarkable as the fishermen say they have never known the like to occur before. Unfortunately no specimens have been obtained, as the fishermen have thrown them away, they having no market value. Although there can be no absolute certainty that these are the fish that were hatched by the Commission, there is yet being any authentic account of any being caught labeled U. S. F. C., still, taking into consideration their size, and the fact that codfish of such a size have never been found plenty before, it seemed no more than reasonable to suppose that these are some of the lot sent out by Uncle Sam, and that the little fellows are still hanging around home. J. W. C.

CALIFORNIA SALMON EGGS.

The following circular has been issued to the different State Fish Commissions:—

UNITED STATES FISH COMMISSION,
FISH AND FISHERIES,
WASHINGTON, Sept. 1st, 1880.

As the California salmon eggs collected by Mr. Livingston Stone at McCloud River, Cal., during the present season will before long be ready for use, I have the honor to ask you to take number one of the fish that were hatched in behalf of your State, to be hatched out and planted in public waters.

It should be understood that the freight from the hatching station is to be paid by yourself, and possibly an additional charge not to exceed \$1 per thousand for the expense of packing and shipping.

Please advise me of the address to which the eggs are to be shipped. Due notice will be given you by telegraph, or otherwise, of the time when the eggs may be expected. They will be ready to forward at once, or not long after Oct. 1st.

STENECOR F. BAIRD, Commissioner.

LAKE TROUT EGGS TO BE HAD IN QUANTITY.—The following letter is self-explanatory:—

WOLFE ISLAND, Aug. 28th.

Prof. S. F. Baird:—

Sir:—I beg to inform you that the fishing grounds in Lake Ontario, situated about ten miles from Cape Vincent, where the New York Fish Commission have obtained all their salmon-trout eggs, is still in operation. The proprietor has been notified that the New York Commission will not require any this season, and so far no other person has made arrangements for the spawn. If you know of any fish breeding establishment which is desirous of obtaining two or three million of salmon-trout eggs please advise them to apply at once to Patrick Troy, Wolfe Island, Ontario. The salmon-trout fishing commences immediately, and ends on the 30th of October. Communications will receive strict attention.

Very truly yours,

PETER KIEL, Fishery Overseer.

We understand that eggs will be furnished already impregnated if desired.

TROUT MURDER.

THE mill pond at the head of Caledonia Creek, including the springs, was suddenly emptied on the last day of August and the whole stream poisoned by the disturbance of the sediment and the consequent liberation of sulphuretted hydrogen. Mr. James Annin, Jr., whose ponds are the first below the spring, is the main sufferer, as he owns the stream for some distance, and depends largely upon it for his supply of eggs to meet the demands of his customers, and not so much upon the fish in his ponds, which are fed by other springs. The State hatchery also suffers in the loss of salmon, native and Western trout, which were beyond price as breeding fish.

It is claimed that this lowering of the water in the mill pond is necessary for the purpose of removing the weeds which fill it, but the owners know by experience in former years the terrible consequences attending its sudden lowering, and should be held responsible by law for all damage done to those below them. It will take at least three years to replace the trout killed, but the market value of the trout lost does not represent one-tenth of the injury to either the State or Mr. Annin, to both of whom each fish represented a definite number of eggs, which are not only lost this year but for succeeding ones also. If there is no law which covers this case, and protects fish culturists from the acts, careless or otherwise, of people who may have property above them, then we suggest that one be framed and passed at the earliest opportunity.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN SEPTEMBER.

FRESH WATER.	
Grayling, <i>Thymallus tricolor</i> .	White Bass, <i>Roccus chrysops</i> .
Land-locked Salmon, <i>Salmo salar</i> .	Black Bass, <i>Micropterus</i> . (Two species.)
Lake Trout, <i>Salmo namaycush</i> .	Rock Bass, <i>Ambloplites</i> . (Two species.)
Mackinogone, <i>Esox lucius</i> .	White-mouth, <i>Channobryttus gulosus</i> .
Pickering, <i>Esox lucius</i> .	Crappie, <i>Pomoxys nigromaculatus</i> .
Pike-perch (wall-eyed pike), <i>Stizostedion acuticorne</i> , <i>S. griseum</i> , etc.	Bluegill, <i>Lepomis macrochirus</i> .
Yellow Perch, <i>Perca flavescens</i> .	Chub, <i>Somoxia corporalis</i> .
Striped Bass, <i>Roccus lucidus</i> .	
SALT WATER.	
Sea Bass, <i>Centropomus atrarius</i> .	"Trout," <i>Cynoscyon carolinensis</i> .
Sheepshead, <i>Ardoriscus probatocephalus</i> .	Weakfish, <i>Cynoscyon regalis</i> .
Porgy, <i>Sciaenops argenteus</i> .	Spotted Whiting, <i>Merluccius heterolepis</i> .
Striped Bass, <i>Morone saxatilis</i> .	Croaker, <i>Micropogonias undulatus</i> .
White Perch, <i>Morone americana</i> .	Bluefish, <i>Pomatomus saltatrix</i> .
Spot, or <i>Leiostomus xanthurus</i> .	Small Mackerel, <i>Scomber maculatus</i> .
Spot, Redfish, or Channel Bass, <i>Sciaenops ocellatus</i> .	Corn, <i>Cyprinus regalis</i> .
Tautog, <i>Tautoga onitis</i> .	Booby, <i>Sarda sarda</i> .
Pollock, <i>Pollockus carbonarius</i> .	Kingfish, <i>Menticirrhus nebulosus</i> .

* In Maine until Sept. 15th.

ALASKA ICHTHYOLOGY.

SITKA, June 1st.
SPRING is gone, but not with it the great deposit of snow, which still covers the mountains to such extent that prospecting and quartz mining are still impracticable. We have passed through the most severe winter recorded in the annals of Alaska, but the spring has been almost continually pleasant. I doubt if there is a spot in the temperate zone where the "precipitation" has been less than that at Sitka, whose climate has been so much belied. During March, April and May there has been rain or snow on 468 hours, or on less than 21 per cent. of the time, and there has been blue sky and sunny weather on 1,366 hours, or nearly 60 per cent.; and during the intermediate 60 per cent. of the time there has not been altogether as much fog as I have seen on our eastern coast in half a day. By months: March, 81 days, 744 hours, rain 48 hours, snow 148 hours, blue sky 433 hours; April, 30 days, 720 hours, rain 117 hours, snow 8 hours, blue sky 401 hours; May, 31 days, 744 hours, rain 148 hours, snow 0 hours, blue sky 470 hours. Can such a climate be justly termed "sunless" and made up of "fog and rain"?
Had we had more rain we would have been better off in many ways; the snow would have washed off the mountains, and the citizens would not have been troubled with a scarcity of water. It may turn out that this temporary stoppage of mining developments in this vicinity will prove a blessing in disguise. A large number of men who have been wintering here have lost their hopefulness, as their "stakes" diminished and have taken advantage of the invitation brought by the Indians, who

last fall went from here to the Chilcat country upon the occasion of the shooting in a drunken row of the Chilcat Chief, Klotz Klotz. And on the 20th an expedition, consisting of five boats, viz., the Chilcat Chief, Capt. Edmund Bean; the May Flower, Capt. Robt. Duggan, the Industry, Capt. Wm. Zoble; the Sitka Jack, Capt. McCluskie, and the launch of this ship, the whole party under the command of Lieut. E. P. McClellan, a volunteer for the duty, started for the Chilcat country, and five days after were spoken within forty miles of their destination. With them went, as interpreter, "Dick," a nephew of the Chief, a man who is, for an Indian, reliable, and who brought down from his uncle the invitation to the miners to come. Dick's influence will be useful, inasmuch as he is the presumptive heir to the chieftainship through his blood, and he has further strengthened his claim by marrying, on his last visit, his aunt.

If this expedition proves a success, and the Chilcats yield to the advance of the whites, a terra incognita will be thrown open, and if, as is reported, there exists in that country valuable "placer" prospects, the results will be of great importance to Alaska. I am not very sanguine; self-interest teaches the Chilcats to retain in their own hands the trade with the interior tribes, and it will be only by showing them plainly that the coming of the whites will be their advantage that their consent can be obtained. *Nous verrons.*

Mr. Marcus Baker, of the Coast Survey, who arrived here by last steamer, and who, until the departure of the expedition, was engaged in magnetic work, accompanied the expedition.

The last two weeks have been very lively in Sitka; hardly had the sensation produced by the starting of the expedition died down than the town became again excited by the arrival of the schooner R. L. Handy, 19 days from San Francisco, with goods for a storekeeper, who, having seen the errors of his ways, has repented and promises to sell to us goods and groceries at something less than the exorbitant prices heretofore demanded, which have forced us to resort to Portland and San Francisco for our supplies. The arrival of a schooner may not seem to you much of an event, but five thousand arrivals in one day do not produce the same sensation that the Handy has. We have been here a year, and the arrivals have been, the California nine times, and one little schooner last fall with lumber. Hardly had the Handy got fairly out of sight when another schooner, this time the Yukon, Capt. Herrenden, of the Coast Survey, came in, 15 days from San Francisco, and to-day the little steamer Favorite, owned by Vanderbilt, came in from a trading voyage in Chatham Straits, and it is safe to say that such a day has never occurred in Sitka harbor.

On board the Yukon I found my friend Dr. Tarleton H. Bean, and, of course, he and I have been deep in the subject of Alaska fish ever since. We have studied out and classified my collection, and for the benefit of your ichthyological readers I give you the list as willingly as I did Bean the bottles—a willingness as regards the latter more than shared by my better half, whose devotion to science is not such as to cause her to enjoy the occupation of the storekeeper shelves by pickled fish and dories. Partial list of salt water fish obtained in Sitka harbor:—

- No. 1.—*Bathymaster signatus*.
- No. 2.—*Sebastesichthys melanops*.
- No. 3.—*Chirus constellatus*.
- No. 4.—*Aspidocottus bison*.
- No. 5.—*Illemilopidius gibbsii*.
- No. 6.—*Lepidopsetta bilineata*.
- No. 7.—*Lepidopsetta* (to be studied.)
- No. 8.—*Chirus decagranulosus*.
- No. 9.—*Cottus polyanthocephalus*.

Fresh water:—

- Salmo irideus*.
- Salmo clarki*.
- Salmo spectabilis*.
- Salmo baldi*.
- Salmo quinnet*.

My *Bathymaster signatus*, it seems, is my most valuable addition to the national collection; but two specimens of this have hitherto been obtained, one of which is in the possession of Prof. Cope, who originally described it in 1873, and the other is owned by the Alaska Commercial Company; both were obtained in Alaska. Bean's description of the fish is as follows:—

"It resembles the rock cod, except that the dorsal fin is continuous and extends along the whole length of back. On the head there are numerous prominent mucous pores. Our specimen is ten inches long and was caught over the ship's stern in March.

Examining my collection by the aid of the light of science I find myself compelled to own up that I didn't know half as much about trout as I thought I did. I'll correct a few of the mistakes which have occurred in my letters: First, as you will see by my list, I have not caught any *fontinalis*, which is rather mortifying, as I thought that my Adirondack experience had qualified me to be an authority on the subject. I knew they had square tails and crimson spots and various other peculiarities, but I didn't know that they were destitute of "hyoid" teeth, nor that the trout described by me as a *fontinalis*, but rather light for its length, and tail not quite so square as that of our eastern trout, *fontinalis*, was the owner of a set of the same sufficiently developed as to show him to be a *Salmo spectabilis*, of whom I never before had heard.

Next, the large trout described in my letter of May 11th as coming from a lake near Mount Edgcomb, and to me unknown, I find to be precisely identical with a trout described in my letter of Sept. 8th as a mountain trout, and that the species is *Salmo irideus*, that is, as far as can be judged from my collection of its characteristics. In everything but size Bean assures me that I describe an *irideus*, and my ten-inch bottle specimen confirms him, but thirty to thirty-six inches is a development beyond his expectations. The Edgcomb fish (we had both sexes) were outlived with ripe ova and milt, and no other trout or salmon procured thus far this spring is so far advanced.

I would like, through your paper, to inform Hi. Nichols and Hank Ruder that if this summer they catch in the original Piseco Lake or its tributaries a trout with hyoid teeth they had better send it, in whiskey, to the Smithsonian.

We have not yet got hold of any of the salmon trout, they not having run into the streams. Several have been taken by the Indians in their nets in salt water,

but they were eaten and none have been caught since Bean's arrival.

About the 20th of May a very beautiful trout was taken in large numbers from a little lake just back of the town, which on our chart is christened "Piseco Lake."

The habits of this trout are peculiar. Every spring, for about ten days, they are plentiful close to the shore, among the lily pads, and will bite on anything except a fly. Before and after this short season none are obtained.

My description of this trout is as follows: Specimen caught May 27th; length, 9½ inches; depth, 3½ inches; weight, 5 ounces; colors: back, dark brown, growing lighter toward median line, at which there is a longitudinal purple stripe extending from opercle nearly to tail, below the median line olive green, lightening to silver white on belly. The entire tinted portion of the fish has a beautiful golden iridescence, so much so that when looked on from the rear, being held in sunlight, the fish seems to be gilded. Excepting the belly, the surface is profusely sprinkled with oval black spots, which mark also the dorsal, adipose and caudal fins; the pectoral, ventral and anal fins are yellowish-tipped with crimson. Tail nearly square, but not as square as that of the *fontinalis*.

It has hyoid teeth, and we make it out to be the *salmo-clarkii*, a non-migratory trout from the fresh waters of British Columbia, Oregon and Washington Territory. None of those taken contained eggs, while the supposed *irideus* from Edgcomb Lake contained both eggs and milt, ripe.

Bean, who is indefatigable, has obtained several fish which I have not hitherto known existed here, among which is a genus reddish and some skates, all of which he has duly numbered and described.

The steamer Favorite brought over from the Hootze-noo banks, near Admiralty Island, quite a quantity of genuine cod, both fresh and salted, which we find to be quite as good as are the cod on our Atlantic banks.

Bean brought me the FOREST AND STREAM of April 23rd and 29th, in which appear the letters from Henry Elliott on my collection.

After this letter of E's, I conclude that my best plan is to give up, not my views, but the attempt to make with them any impression upon his preconceived opinions.

I will, however, in terminating my share of the discussion, simply protest against his endeavor to array Capt. Bailey—who is dead—against me, by quoting his honest and I have no doubt correct views as to "Alaska north and west of Sitka" as disproving my assertions in regard to Sitka and vicinity, and also to state, without any reservation, that Elliott's statement that "one successful planting in four years is the rule at Sitka," is not true.

Year after year good crops are raised from seed furnished by their predecessors, and an "unsuccessful planting" is a rare exception.

And finally, I must protest against his statement that "Piseco agrees with him in the main." I decline to be placed on record as indorsing his views, which most distinctly do not. "The war of potatoes is ended."

Strolling, to-day, along the beach, I saw, moored near a saw-mill which has been patched up and set to work, two immense spruce logs—one was 84 feet and the other 79 feet long, and they were cleared from knots. The lumbermen told me that they contained, one a little over and the other a little under 4,000 feet of lumber, and that such logs were plentiful within four or five miles near the water, and that, delivered at the mill, the two cost him \$10.

Some of the miners who have been hibernating here this winter have employed their time in cutting lumber, and there is on the beach a pile of spruce planks, gotten out by hand, with whip-saws and axes, many of which are from 40 to 50 feet long, 4 inches thick, and with very few knots.

June 9th.—The steamer is in, and I, of course, busy enough to justify my cutting short this letter. Unexpectedly to us she was "on time," an unusual event.

The launch sent with the expedition to Chilcat returned on the 5th inst., having perfectly accomplished its mission.

The gate has been opened, and a crowd of American miners are now settling this kingdom, and with the full consent of the Indians who have furnished to them all required facilities, and the tribes who have been making war at Wrangle have promised to cease hostilities.

Dr. Dall arrived on the steamer, and soon after her departure, he, in the Yukon, will proceed on his voyage to the Northwest.

The steamer brought me a jar of "oulachons" and some notes regarding them, which I will work up in my next.

Dash va dania—which is Russian for *au revoir*.

PISECO.

BLACK BASS IN THE DELAWARE.—This fish was unknown in the Delaware previous to 1875, when several thousand were placed in the river at different places between the Delaware Water Gap and Trenton by the Fish Commissioners of New Jersey and Pennsylvania. They grew very rapidly in the new home, as they have done in every other instance upon record, and two years later "myriads" of young fish could be seen all along the river between the points named. The season for catching them opens June 1st, and closes in December, and all bass under six inches in length are prohibited by law from being taken at any time under a penalty of ten dollars for each fish. This law is constantly violated both in respect to the size of the fish and the season for catching. They are said to be "off their feed" in June, for the reason that during that month they do not bite freely, but from the middle of July to the 1st of September they take the bait freely, and often do so far into October, although the close of September brings the close of good angling for black bass on this river. Probably the best fishing grounds are at Lackawaxen, Shohola, Pond Eddy, Port Jervis, Milford, Dingman's Ferry, Bushkill and the great rapids. The first of these is the one to which they are taken going up on account of the dam of the Delaware and Hudson Canal Co., which was built and is used as a feeder to the canal. Here the fish seem to be larger than below, and a fishway should be provided for their ascent, as they seem to be crowding here to get up further. Few small ones are taken here, and in fact not so many in number as at other points lower down, but they are of a larger size.

THE MAINE PONDS.

HYDE PARK, MASS., Sept. 2d.

Editor Forest and Stream:—

Although it seems almost useless to attempt to write about the Maine woods, after reading the many and glowing accounts of the hunting and fishing in Maine which have appeared in your valuable paper since its first publication, yet I wish to make known to the readers of FOREST AND STREAM a part of Maine known to but few, because heretofore difficult of access. This is the region about Eustis, a town about fifty miles north of Farmington. Within about twelve or fifteen miles of Eustis hills are situated many ponds, of which Tim Pond advertised in your columns is one, and the only one which has had any good accommodations for sportsmen, is Alder Stream Pond. The nearest pond to the mill is Jim Pond, distance about three and one-half miles, which is reached by boat on the North Branch of Dead River, two miles, and a carry of a mile and a half over a good lumber road. At this pond Mr. O. A. Hutchins, of Eustis, under whose guidance I, with a genial companion, spent two happy weeks this summer, has just completed a fine new log camp eighteen feet square, for the benefit of sportsmen, fitting up with a stove and many other conveniences. This pond abounds in lake trout, *Salmo namaycush*, speckled trout, *Salmo fontinalis*, and a fish which I took to be land-locked herring, but am not sure.

By taking a team to haul the baggage to Ledge Falls, three miles, where one will find another camp just built, he can reach the chain of ponds, distance twelve miles by North Branch, which can be reached by a good road, and short carries. Here one can find a good camp, good fishing for lake or speckled trout, while there is no better spot for deer, moose or caribou, and from here several other ponds can be reached, which literally swarm with trout, while the scenery of the whole region is wild and beautiful, always changing as one moves from point to point.

If one does not wish to go to the chain of ponds, he can go up three miles from Ledge Falls to Alder Stream, famous for its trout, up Alder Stream one and one-fourth miles, then a carry of five miles, and he will come to Alder Stream Pond, a sportsman's paradise. Here one will find a new and well equipped camp, built under the directions of Mr. Hutchins. A pond so clear that one can see trout fifteen or twenty feet below the surface, and full of the handsomest silvery-sided speckled beauties I ever saw, and enough to last for years if only true sportsmen go there. The scenery is delightful, and the woods full of deer, caribou and ruffed grouse.

Mr. Hutchins, with his usual enterprise, is having a road cut through to Spectacle Pond, Kibby and Spenser Streams, King and Bartlett Ponds, and Spenser Pond, on all of which he intends to build camps and boats for the benefit of sportsmen. Such forethought for the comfort of sportsmen ought to be rewarded, and I hope that Mr. Hutchins and the other guides of Eustis who are assisting him in this good work will receive the patronage they deserve. This new road to the ponds just mentioned will be completed by the 12th of September, just the time for good fishing and hunting, and letters addressed to Mr. O. A. Hutchins, Eustis, Franklin County, Maine, will receive prompt attention, and the writer will receive in return reliable information.

The expenses at Ledge Falls will be found very light. I was charged twenty cents a day for keeping a horse, and eighteen cents for a dinner or a night's lodging. Guides with boat can be had for from \$1.50 to \$2 per day, according to place visited.

The fare from Boston to Farmington and return, \$9.50, from Farmington to Kingfield by stage, twenty miles, \$1.50, from Kingfield to Eustis, twenty-eight miles, \$1.50, I think. So that the fare from Boston to Eustis and return will be about \$16. This is the time of year when they catch the most and largest trout, during September and October.

TIM POND.—Eustis, Maine, Aug. 24th.—I am here again, just arrived. This is my third annual visit. Mr. Smith has made great improvements, since first I came here in boats, cabins, row movements, etc. When I reached here all the camps were full (except the new one just being finished) with those here for the second time. They tell me trout and hunting were never better here or elsewhere than now. After a few hours with the rod and gun I find they are quite right. An old large game is plenty, and the right sportsman are now coming here to take such. It is now a good time to come from New York or Boston. The stage will take passengers direct to Kenny Smith's Farm House. From his house he runs buckboards seven miles to the cabins. Parties can always be accommodated by engaging "apartments" in advance.

J. W. WARREN TUCK.

THE HOLE IS LEFT YET.—Rangleley Lakes, Camp Kenabago, Aug. 23d.—Below you will find a schedule of the size and number of trout taken in the Moosehead, Kenabago, and Rangleley Lakes, Aug. 23d. by Mr. Rodgers, of Mansfield, Mass. The guide, Rufus Crosby, of Rangleley, Maine. They may sound a little fishy to some of your readers, and I may as well state that I did not see them myself, but copied the list from one who did, and I have good authority for giving this as correct. They were taken in from thirty to forty feet of water. Time, from 1 P.M. until 5: One of 84 pounds, one of 74 pounds, one of 55 pounds, one of 44 pounds, two of 24 pounds, one of 13 pounds, three of 8 pounds, one of 2 pounds, six of 1 pound; total, 32 pounds.

FRED.

MINNESOTA FISHING.—A correspondent who has been fishing some of the Minnesota lakes, kindly sends us the following notes:—

On coming to Minnesota I went to Waterville, where there is said to be the best fishing in the State. Lake Totanka is the best place, and abounds with pike, black bass and croppie. Rock bass are also very abundant. I caught a fine string of them, large ones, that would average nearly a pound, but on opening them I found that their flesh was filled with parasites. These seemed to be black cysts, covered with short hairs or fuzz. They were about the size of peas, and I struck with a flea when pressed with the thumb nail. I presume these are cysts that infest the animal, whatever it is. Black bass at

first refused to bite, but yielded at last to the seduction of grasshoppers. I caught many croppie, all very large and fine, weighing about two pounds. In another lake near by I found the common sunfish, or sun perch, in wonderful abundance. I caught several that would weigh over a pound, the largest was 14 pounds. By natural fly-fishing any number can be taken. They rise readily to the artificial fly, but always contrive to nip so gingerly as not to get harmed, whereas they swallow the natural fly. This manner of biting appears to be common to the whole perch family, and even bass must be allowed to swallow the bait before being struck.

MAXINTUCKEE.—Indiana. Ind.—This lake is in the southwest portion of Marshall County, Ind., twelve miles from Plymouth and nine miles from Argus. It can be easily reached from either station by hack lines running backward and forward. Maxintuckee is derived from an Indian chief who was drowned long before either you or I can remember, but the old settlers around there have often related to me the circumstances as told by their grandfathers. The chief's name was Maxintuckee, and he lived with his squaws on the banks of the lake. He met a beautiful princess, who came with her father to fish in the lake, as was his wonted custom every summer; and he wooed and won not, which threw him into a fit of despondency, and now his remains lie at the bottom of the lake, where the fish swim into his hollow body and the turtle crawls around in his skull; but little do we, the merry, jolly lot of boys and girls, think of this poor Indian whose name we hear mentioned every day. The lake is surrounded by hills covered with woods, which offer some beautiful spots for club-houses. The bottom is clear to a wonderful depth, and everywhere around the lake is a smooth, sandy slope from the shores to the center. Not a place around the whole lake can there be found a "step-off," which makes it an unusually fine bathing place. The varieties of fish caught there are bass, perch, goggle-eyes, etc., but those who go there do not fish much, for the fishing is rather poor, it having been fished so much in the last year or two. In the duck season there is good sport, and the red head ducks of Lake Erie find the outlet of Maxintuckee, offer splendid protection for the hunter. There are eight club houses here, and it is fast growing to be a summer resort instead of the wild, desolate spot where the sportive bass and the nimble squirrel made their home a few years ago, and we fellows, who wish for solitude, where we can fish, hunt and camp out undisturbed, must look elsewhere hereafter.

FITZ.

A BLO TROUT.—Cleveland, Ohio, Aug., 28th.—I enclose the following clipping from the *Leader*: "In our issue of yesterday, you spoke of two trout just received from the Sault, measuring seventeen and eighteen and a half inches respectively, and saying that your columns are open for further statements. Arthur Cogswell caught in the Nepigon River and sent home last week a speckled trout measuring twenty-two inches in length, and weighing six pounds two ounces when taken from the water. Advise us of reliable papers as to weight and measurement can be had if necessary." B. C. S.

I was a member of the party to which Cogswell belonged, and weighed the trout mentioned, when taken from the water, on a pair of scales tested both before and after our trip. I am willing to take my affidavit that it was a genuine brook trout, and weighed six pounds and two ounces. We caught as near as can be estimated, two hundred trout that would weigh from three and a half to five and a half pounds, besides any quantity of smaller ones. This, however, was the largest. L. H. COWLES.

STRIPPED BASS FISHING IS GOOD.—The fishing for striped bass has been good at many points along the Atlantic coast this season. Last week Mr. J. W. Little, of New York, caught fifteen in three days at Narragansett pier, the smallest of which weighed eight pounds, and the largest one forty-two pounds. The latter was exhibited at Sutherland's restaurant on Liberty street, and afterward was secured up at the famous hotel.

Pennsylvania papers chronicle rockfish (the same animal under another name, and therefore just as sweet) as plenty in the Delaware. Even as high as Harrisburg they get them of half a pound weight in considerable numbers. In former years we used to take them at Albany, with a bait of sturgeon spawn, but alas, the bass and sturgeon have both gone.

NEW FISH.—Another new fish has been found by the U. S. Fish Commission. In a recent note from Prof. Goode he says: "We have found a remarkable new fish of a new genus and probably of a new family, related to the family *Ateleopodidae*, hitherto only known from Japan. It is about three feet long and looks like a young sea serpent. It came from the stomach of a ground shark, taken by the schooner The Gatherer, on the Grand Banks. We have christened it *Leleorus voraginorum*. The description will appear in the next signature of the proceedings of the National Museum."

THE "BLUE GILT" TRIP.—Fort Wayne, Ind., Aug. 25th.—But four of the club went. They kept no diary, but reported bass and pickerel fishing immense. One member lost in Pickerel Lake a fine split bamboo rod and appurtenances. They further reported the lake very high, and the grayling streams too high to fish while they were there. They had a grand time. W. D. M.

SALMON CANNING.—Shipments of canned salmon from the Columbia River, Oregon, this season have been moderately active thus far. The bulk of it, 230,000 cases, has been distributed to the markets of the world from San Francisco.

PUBLISHERS' DEPARTMENT.

SCIENTIFIC SUCCESS.—An American college of physicians once offered a reward for any authenticated case of genuine Diabetes which had been entirely cured. The offer remained open for several years and was never drawn. Were it in force now, it would instantly be secured by the proprietors of Warner's Safe Diabetes Cure, for several remarkable recoveries have just come to the notice of the writer. Diabetes is a most deceitful disease, and seldom makes its appearance except by its results. Any readers who are suffering from it, heed and use the cure, and the cure should not delay, as it may be at the cost of life, which Warner's Safe Diabetes Cure is guaranteed to save.

Game Bag and Gun.

—Address all communications to "Forest and Stream Publishing Company, New York."

GAME IN SEASON IN AUGUST.

Moose, *Alces americanus*.
Caribou, *Rangifer caribou*.
Elk or wapiti, *Cervus canadensis*.
Red or Virginia deer, *C. virginianus*.
Squirrels—red, black and gray.
Hares—brown and gray.
Wild turkey, *Meleagris gallopavo*.
Hunted grouse or partridge, *Bonasa umbellus*.
Quail or partridge, *Ortyx virginianus*.
Sora, rail, *Porzana carolina*.
Woodcock, *Ptilinopus minor*.
Black-backed, *Colinus ocellatus*.
Spotted-throat, *Spizella monticola*.
Long-billed, *Colinus virginianus*.
Turnstone, or calico black, *Sceloporus*.
Oystercatcher, *Actitis hypoleucos*.
Great marsh, *Actitis macularia*.
Willet, *Tringoides melanotos*.
Tattler, *Tadania melanotos*.
Yellow-shanks, *Tadania melanotos*.

"This enumeration is general, and is in conflict with many of the State laws."
"It is" generally, including various species of plover, sandpiper, snipe, curlew, oystercatcher, surf bird, phalaropes, avocets, etc., coming under the group *Limacidae*, or shore birds. Many States permit prairie fowl (pinnated grouse) shooting after Aug. 15th.

EFFECTIVE GAME PROTECTION.—Maine is on the right track. The game laws there are respected; or, if they are not respected, the game commissioners are quick to punish offenders. The Portland Press of the 20th inst. has this very encouraging report of the present condition of affairs:—

"Within the present year the powers and duties of the Commissioners of Fisheries for Maine have been extended (as also of wardens) so as to apply to the enforcement of the game laws. Already there have been many offenders apprehended and fined for killing deer and birds during close time, and one of the more recent cases was a violation of the law on woodcock, that cost the offender \$40 and costs—a total of \$80—shooting woodcock before Sept. 1st. In all these cases one half the fine is paid to the prosecutor. In the instance referred to, the prosecution was made by one of the commissioners, and he received the amount to which he was entitled by law as prosecutor (\$20), but gave it to the County Treasurer for the benefit of the poor of the county in which the offense was committed."

"The commissioners prosecute every case of violation of the fish and game laws of which they have knowledge whenever the necessary evidence can be procured. If the Legislature of each succeeding year grants the necessary appropriation for the support of this department the fish and game laws of the State will each year be as well enforced as our laws."

"Printed abstracts of the general law of the State relative to fish and game have been distributed, so that there need be no transgressions through ignorance if no change is made in the existing well known and excellent laws."

"The next annual report of the Commissioners of Fisheries and Game will probably afford some profitable reading, especially for those who have been in the habit of ignoring the laws of this State."

The following comes to us from a Portland correspondent:—

Secre—Thode Davis' Gun Store, Portland, Maine. Time, 1 P. M., Aug. 28th.—Enter Dr. —. Clerk—"Doctor (who had been after game with an old carbine), Everett Smith will be after you." Before a reply could be made the Doctor was called aside by a gentleman and entered into conversation with him. A minute or so elapsed, when to the surprise of the clerk, Mr. Smith, accompanied with his superior setters, as usual, dropped in after some shot. While the clerk was filling his order the Doctor turning from his friend who went out, addressed the clerk in answer to his sally, and averred that he would do regardless of Everett Smith.

Everett Smith—"Sir, my name is Everett Smith, and as you seem to be addressing your remarks to others, I inquire why you do not address me?" The Doctor's face flushed not a little, the clerk's countenance darkened, and an introduction and explanation followed. The Doctor was glad to see that it happened, because he now knows who the Game and Fish Commissioner was, and also that he believed Mr. Smith when he said that whoever broke the laws, be he whoever he may, persecution would follow if proof could be obtained.

SPECTATOR.

RAIL SHOOTING.—New York, September 3d.—On last Tuesday evening I went to Hackensack to catch the first day of railbird shooting. I had some trouble in getting a pusher, as they were almost all engaged. In the morning at 5:30 the tide began to rise in the meadows, and we started. There were altogether about twenty-five boats out or starting at that time. The meadows, which are not more than a mile long and a quarter wide, were full of birds. I having a muzzle-loader, and missing the first nine birds, only got or shot twenty-one, four of which we could not find on account of the reeds being so thick. Our shooters with breech-loaders did not get less than thirty-five. It was very hard work for the pushers, the tide being so low and the reeds very strong and close. The sun also was very hot, it being altogether a very warm day. Under your heading of "Game Bag and Gun" I don't see any mention of rail. Are they known by any other name than that? As this is the first time I ever shot them I don't, of course, know much about them. If you have another name will you be so kind as to let me know through your paper? If any of your readers who cannot spare more than a day from their business want to go, they can take the 8:12 P. M. train on the Midland railroad from Jersey City. When they get to Hackensack they can inquire for the Franklin House, where they can get a pusher and stay over night. If they wish a good pusher they can inquire for Mr. Leonard Terluene, who will give them a good day's sport, as he knows every inlet and outlet in the meadows, upon which he has shot ever since he was a boy. Can you tell me where there is a good place for quail shooting

near here? I am a great lover of the sport, but I have not the means to go far, nor can I stay from my business more than two days at a time. Hoping I have not taken up too much of your time, I remain, G. E. J.

There is no quail shooting in this vicinity at this season of the year.

A PRACTICAL GAME CONSTABLE.—North Tarrytown, Sept. 5th.—Editor Forest and Stream.—In my opinion, the first step toward enforcing the game laws is to let people know the law. I would, therefore, suggest that each game protective association have a number of copies of the game laws printed in poster and handbill form, which can be done at a small cost, and distribute the same among farmers and wherever they will do some good. It would also be well for the game protective associations throughout the State to see that good men are nominated and elected as game constables at the town elections in the spring of each year, for often there are men selected only to fill up the election ticket (and I know some that did not fill up a partridge from a turkey, or a trout from a sucker). On the solicitation of some of my sportsmen friends I accepted the nomination and was elected to the office of game constable at the election of last spring. After I was sworn into office I made up my mind to enforce the game laws if it was a possible thing to do, and the first thing I did was to have the laws published in the local newspapers (a thing that I have done from time to time for a number of years), and then I had, at my own expense, 250 copies of the law printed in circular form, and distributed the same among the farmers and wherever I thought they would do some good. It is astonishing to see how much interest a good many people take in the game laws since they know that there is some one looking after them. Some of the sportsmen hereabouts think that the season for woodcock should not open until Sept. 1st, instead of Aug. 1st, and I think they are right, for there are a good many partridge shot during August while men are hunting for woodcock.

A GAME CONSTABLE.

The right man in the right place will always find some means of accomplishing a desired end. The way our correspondent has gone to work to perform his task proves that he is the man for the position. With the game laws in simple, plain shape posted in the village post office, railway station, and in the baggage cars of the trains, no one can plead ignorance of the provisions.

SHOOTING NOTES FROM MINNESOTA.—Fairmont, Minn., Sept. 1st.—Editor Forest and Stream.—The recent wholesale poisoning of bird-dogs in Cottonwood County, and the equivocal tone of the local press (notably *The Window Reporter*) in regard thereto, are still topics of peculiar interest to non-resident sportsmen in Minnesota. True, the people of Window, many of whom chuckled over the disfigurement of "them dandy sportsmen," are now changing their tone and explaining things away, as they begin to perceive that the dastardly act was also a lamentable blunder, for the owners of valuable dogs have not been slow to shake the mud of Window from their boots and seek their sport in less perilous regions. In future the pot-hunters of Window will have things pretty much their own way, but the hotels and business houses of the village, as well as the neighboring farmers, will probably miss the ready cash which the average visiting sportsman lavishes so profusely during the hunting season.

Note.—It has been maintained with a good deal of plausibility, that more money is annually brought into the State by sportsmen than the average net profit of the wheat crop will amount to.]

Prairie chickens are unusually abundant; this year. Here in Martin County, notwithstanding a three weeks' fusillade, the grouse seem as numerous as ever, while ducks and geese are already beginning to fly. All things considered, Fairmont is the best hunting center your correspondent has yet found. Its hotel (the Occidental), is probably the best in the Western country; new, spacious and well conducted, with good livery, and well appointed drivers. Lucas, of St. Louis, is here with his famous Irish brace, Erin and Biddy. The St. Louis Kennel Club is camped a few miles south of town. Sanborn, the breaker of Nellie, winner of last year's brace stakes at Patoka, is training some magnificent Llewellyns, among them Count Noble, Dashing Lyon and Little Lady, names which will probably be heard of hereafter. Whitford, the famous hunter and trainer of the St. Louis Club, is also here, having with him some twenty dogs. The grouse in this section were rather early and are now full grown. Their flight is about equal to that of a November quail, demanding fair skill on a thirty yard rise, and affording fine sport.

WAUSEL.

AN AIRDRONACK TRIP.—Minerva, Essex County, N. Y., August, 1880.—Leaving New York on the 11 P. M. train Monday last brought our party into Albany about 6 A. M. Tuesday morning we started for Saratoga and again for North Creek, N. Y., via Airdronack Railroad, thence by private "lucky board," sixteen miles, into the woods of our present log cabin, "Alden Lair Lodge," where we are very comfortably cared for by the genial Tom Murphy, who does his utmost for the comfort and happiness of his guests.

The past week has been devoted to fishing, with the exception of one morning, when the dogs were started on a deer scent, and were stationed at the different runs of the Boreas River and Long Run. An old dog and fawn were started by the dogs, but they were shot, instead of down, as intended, so we did not get a shot, but we saw the tracks and unmistakable evidence of numerous deer within two miles of our "lodge."

Next morning, with Fred Loveland to guide, we started to fish the Van De Whacker River, and such trout are not often seen as we brought back—one weighing one pound and a quarter, and six or seven more weighing from three-quarters to a pound each, besides the small ones from two or three ounces up. We brought back fourteen pounds of brook trout, all caught within a distance of two miles fishing on the Van De Whacker River.

We fished one day on the Hewitt Pond (which is down on Stoddard's map of the Airdronack Wilderness, and a pretty accurate guide it is), where two speckled beauties weighing four and one-half pounds were captured by

as such. Now, as to the size or weight of our modern cockers, I think that thirty pounds should be called the limit, although twenty-five to twenty-eight pounds is of course preferable for work, and even as high as eighteen to twenty pounds, where desired mostly for pets and house dogs, is admirable. This is an age of improvement, and cockers are better to-day than ever before, and certainly nothing could have been done to improve their usefulness for American work, more than the increase of their size, bone and muscle, from the old eighteen to twenty pounds breed to the present twenty-five to twenty-eight pound ones. I have repeatedly found that in measuring the finest modelled specimens of the breed that twice the length at fore shoulders is the almost exact length from end of nose to root of tail, and an inch and a half or two inches either way detracts from the dog's beauty and usefulness. The hair should not be curled, but wavy and silky, neither should it be flat, as some advocate, although I have seen fine specimens with coats perfectly flat; but I always look rather suspiciously upon such. The tail, ears, breast, legs and belly should be well feathered with nearly straight hair, rather coarser than their body coat. As to the standard color, or, in other words, in Spain, I am aware that I shall differ from many who consider themselves competent judges, for I consider liver with no white, or with white ruffe in bosom, the genuine color originally of the spaniel race, or perhaps liver and white ticked has nearly as good a claim, but black, or black and white, or black and tan, are certainly introduced colors, and do not belong to the cocker at all, and especially the modern cocker as it should be; although many have adopted this color and inbred and interbred until they scarcely show a drop of foreign blood; but this color has never given satisfaction to its breeders, or benefited the cocker race, and I am certain it never will reach the standard of perfection that the old standard liver, or liver and white, has done. Orange and white, or lemon and white, are not either one of them, I am positive, introduced colors, as under certain conditions liver and white will produce orange and white, or lemon and white occasionally, and the idea that lemon or orange indicates a mixture of blood, as I have heard some say that those colors in the clumber spaniels come from introduction of cocker blood. One argument is as good as the other, and both are absurd. Orange and white, or lemon and white, although admired by some, will never give more satisfaction to their breeders than the black or black and tan have, although good cockers of these colors find a ready sale. The ears of all cockers should be maturely belong, and well covered with long silky hair, not set too high or too low upon the head, and laying flat on the cheeks; a fine ear on any dog, I hold as a most certain indication of powerful olfactory organs, or powers of smelling, and on this point I find I agree with nearly all the old time breeders. As fashion changes, so do dog's tails. Fifty or sixty years ago fashion demanded that cockers' tails should be docked to only one-third of their natural length, but I am happy to see that they are now permitted to wear about one-half or two-thirds of its original length. This I think to be improvement, both to their beauty and style. Cockers of one-third removed is, I think, about right, as it removes that part of the tail which is so sore from whipping it among the brush and briars, and leaves enough tail to have a fine flag and handsome swing to the same. I shall not now go into further description of modern cockers, but may perhaps, ere long, with your permission, give you my ideas as to their necessary qualifications in manner of judicious breeding, breaking, etc.

SPANIEL.

J. H. WHITMAN'S KENNEL.

WHILE on a trip recently through the West, it was our good fortune to form the acquaintance of Mr. J. H. Whitman, of Chicago, a gentleman of large railroad experience, having been for many years one of the leading Eastern lines for nineteen years as manager of their passenger business from the West. From him we received much valuable information regarding the most noted resorts of sportsmen during the open season. By his invitation we visited his kennel of fine dogs for sporting purposes; feeling your readers might like some idea of his stock, we take the liberty to say that when shown were first inaugurated he was one of the most prominent parties in establishing his dog Grouse, a handsome lemon and white dog, took the first prize ever given at a show in this country; this was at the Dexter Park, where a number of sportsmen were holding a pigeon shoot, having agreed to bring their dogs for friendly competition. Soon after, a large show was given in Exposition Building, Chicago, where Grouse won first prize as the best stock dog exhibited. Of this dog Mr. Whitman never fails to speak; he considers him equal to any he has owned since; still keeping the breed, and crossed with recent importations of field trial, or Laverack setters, he claims there are none superior. When the dog's pedigree names for dogs through the columns of sporting papers first originated, he claimed the name for this breed of prairie rangers, by which they are known in the West; he has now two dogs and one bitch which he prizes very highly. Prairie Ranger, Prairie Joe, Prairie Fly are the names; they are by the pure Laverack setter Charm, out of Pearl, a daughter of Grouse, and Valentine's Nelly, both noted and well known for their extra fine qualities. Ranger is a large fine looking animal, pure white with the exception of lemon ears. Joe is also large, lemon and white ticked, with dark eyes and nose. Fly is much smaller, but equally well made. In examining these dogs it was plain to be seen that in muscular development they were very superior; fine glossy coats, legs and feet that looked as if they could stand any amount of work, and Mr. Whitman is very proud of them from the fact that they are by Charm, whose reputation was not placed very high during the time of discussion regarding Minnesota Field Trials, by the editor of a Western sporting paper.

Charm is a descendant from the noted Pride of the Border and Fairy; a well-formed animal, but not of a fashionable color, being like his sire, liver and white and of a rather rusty liver, when we saw him. He was purchased at a nominal figure, as the party owning him did not consider him valuable, but Mr. Whitman saw in him what we have since seen demonstrated, that it was not the best looking that always gets the best stock, in which Charm progeny proved he was correct. He is considered one of the most valuable dogs in the

kennel. Blue Dash, a handsome blue belton setter, by Pride of the Border and Dora, is a grand dog all over, and very intelligent. He is of the Laverack form, and to look at him one would think he was slow, yet he is equally fast with the best, and his endurance, seeming to understand were astonished at his intelligence, and he cheerfully obeyed; he is the pet of the family, with whose little daughter he likes to be most of the time. Blue Drake, his son, out of pure Laverack setter Diamond, is marked exactly like him, and although young, will when fully developed be fully his equal in all respects. Nelly May, a daughter of Blue Dash out of Jolly May, is yet young, only nine months old; she has a black and white head and blue ticked body; she goes into breaker's hands this fall, promising to sustain the reputation of her sire. Pride, Judy and Flora are by Charm out of a lemon and white native bitch; they are all lemon and white. Pride and Judy are fully trained, as one could plainly see by their actions in a field where they were shown. Prairie Queen is a large, fine bitch, with very fine head, long neck, and grand body; she was in whelp to Charm. She is litter sister to Prairie Belle, winner of first prize at Minnesota Field Trials; also to Prairie Rose, winner of second prize at Nashville. Milley is a very fine white bitch with a ticked body; she is by the noted Rob Roy out of Waddington's Daisy. She was secured to breed from, her progeny having been not only handsome, but extra good in the field. Flirt is a long, clean cut and game looking bitch, white with lemon on head; was bred by Geo. Waddington, out of Milley. Clextan, her brother, is one of the grandest young dogs we have seen; he has not yet been trained, but shows wonderfully well in the field, and goes into training next week. He is liver and tan head, liver spots on side, balance white; those are by Druid, it will be seen that no better combination of blood can be found in any kennel; and these animals show fine care. Mr. Whitman says he shall have five or six as well trained dogs as can be had this fall, several of them having been in trainers' hands two years. Mr. Whitman believes in having dogs thoroughly broken, although it does cost some money, for he has but little time to spare from his business for shooting, and when he does go the great pleasure is in seeing his dogs work to perfection; none of his dogs, that he claims are thoroughly broken, cost less than \$75 to break them. Besides, the setters mentioned he has as fine a pair of Scotch deerhounds as one seldom sees. The dog Bruce has won first prize at St. Louis, and we predict he can do so in any show. It has not been our lot to see one equal to him. The bitch we did not like as well, notwithstanding she was imported, and from good strains. Of the cocker spaniels, of which he has some beauties, I shall speak in future letters.

OUT WEST.

ENGLISH DOGGES*

The fifth Section of this treatise.

Containing Curres of the mungrell and rascal sort and first of the Dogge called in Latine, *Admonitor* and of vs in English *V Vappe* or *V Vanner*.

Of such dogges as keep not their kinde, of such as are mingled out of suauy sortes not imitating the conditions of some one certaine kinde, because they resseble no notable shape, nor exercise any worthy property of the true perfect and gentle kind, it is not necessary that I write any more of them, but to banish them as unprofitable implements, out of the boundes of my Booke, unprofitable I say for any use that is commendable, except to intertaine strangers with their barking in the day time, giuing warning to them of the house, that such and such be newly come, whereupon wee call them admonishing Dogges, because in that point they performe their office.

Of the Dogge called Turnespele in Latine *Turneraster*.

There is comprehended, vnder the curres of the coarsest kinde, a certaine dogge in kytchen seruise excellent. For wlie any meate is to be roasted they go into a wheele which they turning rounde about with the waight of their bodies, so diligently looke to their businesse, that no drudge nor skulion can doe the feate more cunningly. Whom the popular sort hereupon call Turnespeles, being the last of all those which wee haue first mentioned.

Of the Dogge called the Daunser, in Latine *Saltator* or *Tympanista*.

There be also dogges among vs of a mungrell kind which are taught and exercised to daunce in measure at the musicall sounde of an instrument, as at the iust stroke of the drombe, at the sweete accent of the Cyterne, & tuned strings of the harmonious Harpe showing many pretty trickes by the gesture of their bodies. As to stand bolte upright, to lye flat vpon the grounde, to turne rounde as a ringe holding their tiales in their teeth, to hegge for their meate, and sundry such properties, which they learne of their sagadundicall masters, whose instruments they are to gather game, within Citie, Country, Towne, and Village. As some which carry olde apes on their shoulders in coloured iackets to moue men to laughter for a little lure.

Of other Dogges, a short conclusion, wonderfully ingendred within the coastes of this country.

Three sortes of them.	The first breed of a bytch and a wolfe.	In Latine <i>Lyciscus</i> .
	The second of a bytche and a foxe.	In Latine <i>Lacenn</i> .
	The third of a beare and beagges.	In Latine <i>Præmæ</i> .

Of the first we haue none naturally bred within the borders of England. The reason is for the want of wolves, without whom no such kinde of dog can be in-

*Of English Dogges, I the diuersities, the names, [the nature and the properties.] A Short Treatise written in latine by Johannes Calus of the Citie of Bruckler [in the University of Cambridge] And newly drawne into Eng. [by] Abraham Fleming Student [of the University of Cambridge] Printed at London, by Iohnes, and are to be sold euerie where at S. Sepul: chris Church without Newgate 1578.

gended. Again it is deliuered unto thee in this discourse, how and by what means, by whose benefite, and within what circuite of tyme, this country was cleerly discharged of rannying wolues, and none at all left, no, not to the least number, or the beginning of a number, which is an *Varri*.

Of the second sort we are not vtterly voyde of some, because this our English soyle is not free from foxes (for in deede we are not without a multitude of them in so much as diuerse keepe, foster, and feede them in their houses among their boundes and dogges, eyther for some maladie of mind, or for some sickness of body) which peraduenture the sauour of that subtil beast would eyther mitigate or expell.

The third kinde which is bred of a Beare and a Bandogge we want not heere in England.

And why should not this be consonant to truth? why should not these beastes breed in this lande, as well as in other forreigne nations? For wee reade that Tigers and dogges in *Hircania*, that Lyons and Dogges in *Arcadia*, and that wolues and dogges in *Francia*, couple and procreate. The *Frang* which is bred of a beare and a dogge.

Is ferce, is toll, is stout and stronge, And vttereth soe to fleshe and bone, His further force in such longe In rage he will be true of none.

That I may vs the wordes of the Poet *Gratius*. This dogge exceedeth all other in cruell conditions, his leering and cleering looks, his stature and saunge visage maketh him in sight fearful and terrible, he is violent in fighting, & wheresoeuer he setteth his tenterhook teeth, he laketh such sure & fast hold, that a man may sooner teare and rende him in sunder, then lose him and separate his chappes. He passeth not for the Wolfe, the Beare, the Lyon, nor the Bulle and may worthily (as I thinke) be compared with *Alexanders* dogge which came out of *India*. But of these, thus much, and thus farre may seeme sufficient.

A starte to outlandish Dogges in this conclusion, not impertinent to the Authors purpose.

These and custome hath intertained other dogges of an outlandish kinde, but a fewe and the same beyng of a pretty bygess, I meane Island dogges curled & rough al ouer, which by reason of the length of their haire make showe neither of face nor of body. And yet these curres, forsooth, because they are so strange are greatly set by, esteemed, taken vp, and made of many times in the roome of the Spaniell gentle or comforter. The nature of men is so moued, may rather married to nouelties without all reason, vt, iudgement or persuerance. *Eromen altiorum, patrum singenels*.

outlandish toyes we take with delight Things of our owne nation we haue in despiht.

Which fault remaineth not in vs concerning dogges only, but for artificers also. And why it is to manyfast that wee dislayne and contempne our owne workmen, be they neuer so excellent, be they neuer so skillfull, be they neuer so cunning. A beggerly beast brought out of barbarous borders, from the vttermost countreys Northward, &c., we stare at, we gaze at, we muse, we maruaile at, like an asse of *Uimonia*, like Thales with the brazen shankes, like the man in the Moone.

The which default *Hippocrates* marked when he was alyue as evidently appeareth in the beginning of his booke *Pert Agnos* so intituled and named:

And we in our worke intituled *De Ephemera Britanica*, the people of England haue more plentifully expressed. In this kinde of looke which is most blockish, and yet most waspish, the same is most esteemed, and not among Citizens only and idly gentlemen, but amonge lustie Lordes also, and noble men, and daintie courtier ruffling in their ryotous ragges. Further I am not to wade in the foorde of this discourse, because it was my purpose to satisfie your expectation with a short treatise (most learned *Conrade*) not wearysome for me to vryte, nor tedious for you to peruse. Among other things which you haue receaued at my handes heretofore, I remember that I wrote a seuerall description of the *Getulian* Dogge, because there are but a fewe of them and therefore very seldeome scene. As touching Dogges of other kyndes you your selfe haue taken earnest paine in writing of them both lightly, learnedly and largely. But because wee haue drewnt this libell more at length then the former which I sent you (and yet briefer than the nature of the thing might well beare) regarding your more earnest and necessary studies. I will conclude making a recursall notwithstanding (for memories sake) of certaine specialties coneyned in the whole body of this my breuiary. And because you participate principal pleasure, in the knowledge in the common and vsual names of Dogges (as I gather by the course of your letters) I suppose it not amysse to deliuer vnto you a shorte table containing as well the Latine as the English names, and to render a reason of euery particular appellation, to thintent that no scruple may remaine in thpoint, but that euery thing may be sifted to the bare bottome.

A Diall pertaining to the Fyfte Section.

Dogges continued in Di- all or Table are	The Wapp or War- ner, The Turnespele, The daunser.	called in Latine (Canes Rustici)
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A Supplement or Addition containing a demonstration of Dogges

names how they had their

Originall.

The names contained in the general table, for so much as they signifye nothing to you being a stranger, and ignorant of the English tongue, except they be interpreted: As we haue giuen a reason before of ye latine words so man we to doe no lesse of the English, that euery thing maye be manifest unto your vnderstanding. Whereto I intende to obserue the same order which I haue followed before.

The names of such Dogges as be contained in.

the first section.

SAgax, in English Hundee, is derived of our English hunte. One letter changed in another, namely T. into D, as Hunt, Hundee, whom if you conjecture to be so named of your country word *Hunde* which signifieth the general name Dogge, because of the similitude and likeness of the wordes I will not stand in contradiction (friend Gesner) for so much as we retaine among vs to this day many Dutche wordes which the Saxons left at this time as they occupied this country of Britaine. This much also understand, that as in your language *Hundee* is the common word, so in our natural tounge dogge is the vniuersall, but *Hunde* is peticular and a speciall, for it signifieth such a dogge only as serueth to hunt, and therefore it is called a hunde.

Of the Gasehound.

The Gasehounde called in latine *Agasenus*, hath his name of the sharpnesse and steadfastnesse of his eyesight. By which vertue he compasseth that which otherwise he cannot by smelling attaine. As we haue made former relation for to gaze is earnestly to viewe and beholde, from whence floweth the derivation of this dogges name.

Of the Grehounde.

The Grehounde called *Leporarius*, hath his name of this word, Gre, which word soundeth *Gratus* in latine, in Engli-h degree. Because among all dogges these are the most principall, occupying the chiefest place, and being simply and absolutely the best of the gentle kinde of houndes.

Of the Lemyer or the Lymmer.

This dogge is called a Lemyer, for his lightnesse, which in latine soundeth *Leuitas*, Or a Lymmer which worde is borrowed of Lymmer, the latinists name *Lorum*; and wherefore we call him a Lemyer of this worde *Leuitas* (as we doe many things besides) why we deride and drawe a thousand of our termes out of the Greeke, the Latine, the Italian, the Dutch, the French, and the Spanishe tounge: (Out of which fountaines indeede, they had their original issue.) How many wordes are buried in the grave of forgetfulness growne out of vse? wrested awrye and peruersly corrupted by diuers defaultes? we will declare at large in our booke intitled, *Symphonia vocum Britannicarum*.

Of the Tumbler.

Among houndes the Tumbler called in latine *Vertagus*, is the first of al out of the French fontaine. For as we say Tumble so they *Tumbler*, reseruing one sense and signification, which the latinists comprehend vnder this worde *Vertere*. So that we see thus much, that Tumbler cometh of *Tumbler*, the vowel, I, changed into the *Liquid L*, after ye manner of our speache, Contrary to the French and the Italian tounge. In which two languages, A *Liquid* before a *Vowel* for the most part is turned into another *Vowel*, As, may be perceived in the example of these two wordes, *Impiere & piano*, for *Impiere & piano*, L before E, changed into I, and L before A, turned into I, also. This I thought convenient for a taste.

The names of such Dogges as be contained in the second Section.

After such as serue for hunting orderly doe follow such as serue for hawking and fowling. Among which the principall and chiefest is the Spaniell, called in latine *Hispaniolus*, borrowing his name of *Hispania* Spaine, wherein he was first bred, not pronouncing the Aspiration H, Nor the *Vowel I*, for quicknesse and redinesse of speach say roundly A Spaniell.

Of the Setter.

The second sorte of this second diuision and second set, is called a Setter, in latine *Indax*, Of the worde Set, which signifieth in Englishe that which the Spaniell meanes by this word *Locum designare*, ye reason is rehersed before more largely, it shall not neede to make a new repetition.

Of the water Spaniell or Finder.

The water Spaniell consequently followeth, called in latine *Aquaticus*, in English a water spaniell, which name is compounded of two simple wordes, namely Water, which in latine soundeth *Aqua*, wherein he swimmeth. And *Spanus* *Hispania*, the country from whence they came. Not that England wanted such kinde of Dogges, (for they are naturally bred and ingendred in this country.) But because they beare a general and common name of the Dogges synce the time they were first brought ouer out of Spaine. And wee make a certaine difference in this sort of Dogges, eyther for some thing which in theyr voyce is to be marked, or for something which in theyr qualities is to be considered, as for an example in this kinde called the Spaniell by the apposition and putting to of this word water, which two coupled together sounde waterspaniell. He is also called a fynder, in latine *Inquisitor*, because that by serious and close seeking, he findeth such things as be lost, which word *Finde* in English is that which the Latines meane by this Verbe *Inuenire*. This dogge hath this name of his property because the principall point of his seruice consisteth in the premisses.

The names of such Dogges as be contained in the thirde Section.

Now leauing the seruie we of hunting and hauking dogges, it remaineth that we runne ouer the residue, whereof some be called, by some, some course, or some mungrels or rascalls. The first of these is the Spaniell called *Canis Melitens*, because it is a kinde of dogge accepted among gentles, Nobles, Lordes, Ladies, &c., who make much of them vouchsafing to admit them so farre into theyr company, that they will not onely lull them in theyr lappes, but kysse them with theyr lippes, and make them theyr prettie playfellows. Such a one was *Gorgius* little puppye mentioned by *Theocritus* *Siracensis*, who taking his iourney, straightly charged and commaunded his mayde to looke to his Dogge as charely and warily as to his childe: To call him in alwayes that he wandred not abroad, as well as to rock the babe a sleepe, crying in the cradle. This puppye and peasantly curd, (which some frumpingly terme fysteing hounds) serue in a manner to no good vse except, (As we haue made former relation) to succour and strengthen quailing and quanning stomaches.

The names of such dogges as be contained in the fourth Section.

Of dogges vnder the course kinde, we will deale first with the shepherds dogge, whom we call the Bandedge, the Tydogge, or the *Mastvue*, the first name is imputed to him for service *Quoniam pastori famulari*, because he is at the shepherds his masters commaundment. The seconde a *Ligamentum* of the hand or chaine wherewith he is tyed. The thirde a *Saguna*, of the fatnesse of his body.

For this kinde of dogge which is usually tyed, is myghty, grosse, and fat fed. I know this that *Augustinus Niphus* calleth this *Mastvius* (which we call *Mastvius*). And that *Albertus* writeth how the *Lepiscus* is ingendred by a beare and a wolfe. Notwithstanding the self same Author taketh it for the most part *pro Molosso*. A dogge of such a country.

The names of such dogges as be contained in the fiftie section.

Of mungrels and rascalls somewhat is to be spoken, And among these, of ye *Vpvue* or *Turnespet* which name is made of two simple wordes, that is of *Turne* which in latine soundeth *Vertere*, and of *spete* which is the Italian and French word inclineth closer to the Italian and French word *versator*, Turnspet. He is called also *Vpvue* of the natural noise of his voyce *V'fau*, which he maketh in barking. But for the better and redier sounde, the vowel, u, is changed into the consonant, p, so y for wampe we say wappe. And yet I wot well that *Nonius* borrow his *Baubari* of the natural voyce *Bau*, as the *Grecians* doo theyr *Bouscin* of wau.

Now when you understand this that *Saltire* in latine signifieth *Dansare* in English. And that our dogge thereupon is called a dancer, as in the Latine *Saltator*, you are so farre taught, as you were desirous to learne, and now suppose I, there remaineth nothing, but that your request is fully accomplished.

The winding vp of this worke, called the Supplement, &c.

Thus (friend Gesner) you haue, not only the Kindes of our country dogges, but their names also, as well in latine as in English, their offices, seruices, diuersities natures properties, that you can demaunde no more of me in this matter. And albeit I haue not satisfied your minde peraduerture (who suspected all speech of my performance of your request employed, to be meer de-layes) because I stayde the setting fourth of that vnperpet pamphlet which, five yeares ago, I sent to you as a priuate friende for your own reeding, and not to be printed, and so made common, yet I hope (hauing like the beare licked over my young) I haue waded in this worke to your contentation, which delap hath made somewhat better and *deuenter Phœnices*, after writte more meete to be perused.

The end of this treatise.

FINIS.

DOG NOTES FROM MINNESOTA.—In *Camp near Fairmont, Martin County, Minn., Aug. 21st.*—I have been here a week now, and with Whitfort, who is encamped at this place. He is training the St. Louis Kennel Club dogs. He has Lena, Trap, Viking, Trinket and Keswick at work on chickens. Keswick is a wonderful animal; she goes like the wind, but her gait is so smooth and even that running seems to cost her no exertion. She has a remarkable nose, and is as stanch as any dog you ever saw. Now that she is waded down to good running condition, you can see her anatomy, every cord and muscle, as well as if she were skinned. I never saw such a display of muscle on a dog. Viking and Trap are doing splendid work and will be hard to beat at the field trials.

Mr. Lucas is here with his brace of Irish setters, Erin and Biddy. I have noticed that doggy men have been giving Irish setters the go by, lately, but if there are any other dogs that can equal their brace, I should like to see them. I have shot over them for four days, and they are faultless in their work. Perhaps some would not like their quiet way of working, and would prefer the slash and dash of a big pointer or an English setter. I admit that these dogs are not showy, but they find as many birds as any; point, back, drop to wing and shot, and retrieve without ever tiring for. For several days they have done the work of four guns, and never lost a dead bird. Part of the time four guns have been shooting over them, and got plenty of work.

Dash III. is here and Countess May, in Whitfort's charge. Dash is a slashing dog, but does not work as well as May. May shows splendid qualities, but needs a great deal of work to sober her down. Mr. Sanborn is at Fairmont with several puppies in training. Messrs. Orth and Wilson, of Pittsburg, are with him. The country is a pleasant one to shoot over and birds are very abundant. I will write again in a few days. J. M. T.

A HINT AS TO ANATOMY.—Country Farm, Spottsylvania County, Va., Aug. 25th. Editor Forest and Stream.—I have no disposition whatever to scratch on the Catherly dog scratching subject, to which ample justice has been done in FOREST AND STREAM. Nevertheless, you had one correspondent, a "notary public," who wrote from "Wauseon, Ohio," upon this matter, to whom, with your permission, I should be pleased to put a question or so. Your correspondent says with regard to this dog scratching business, "I would suggest that the question would be harder to answer to read. Did any one leg scratch his left fore shoulder with his right hind leg while standing up?" Now, what I wish to know is this, it is always the way with well bred Ohio dogs (for it is of this class only the notary writes) that they scratch themselves with their legs, or do they not sometimes scratch with their paws? In Virginia dogs' paws are, so far as I know to the contrary, ever armed with claws, and I was under the impression they were purposely given them to leg scratch. I would like also to know if it is a fact that Ohio dogs scratch their hind shoulders with their legs or paws either lying or standing? Although Virginia has furnished your great bench show, Mr. Editor, with one of its judges for the last two years, I am satisfied we are much behind the times with regard to the anatomy of both dogs and horses. It has only been a few weeks since I observed in an editorial which ap-

peared in one of our great sporting papers the editor told us of the foreshoulders of a horse.

BIRDSPORT.

Confess, he hath thee here.

A RETRIEVER'S INTELLIGENCE.—St. Leonard, P. Q., Aug. 9th.—A friend of mine, Mr. W., owns a very intelligent retriever bitch. A farmer near by killed a pig, and at night left the head upon a stump near the house. In the morning the pig's head had disappeared. My friend and his dog coming by, the man mentioned to him his loss. Mr. W., turning to his bitch, said: "Pup, have you stolen the pig's head? Go right away and bring it back, you bad dog." The bitch slunk away into the woods, yowled a while, and in a short time returned carrying the missing pork, which she immediately dropped before the farmer, the turning bolted for home at her best speed, and hid for the remainder of the day. Upon another occasion, daughter of Mr. W. started one evening to visit a neighbor at a little distance, carrying with her a lighted lantern. Arriving at the house she left the lantern outside in the porch. Soon afterward the bitch started out to find her young mistress, but I suppose she found first the lantern, and recognizing it as family property she took it up carefully and brought it home. As she entered the house with it alight, Mr. W. directly ordered her to "take it to Mary," and she then carried it back to the neighbor's house, scratched at the door until it was opened, and walked up to the young lady with the lantern still alight. Now a hot lantern is not the most comfortable sort of thing for a dog to carry.

Pup is first-class for duck shooting, obeying the slightest motion of the hand.

HEMLOCK.

A DOG TANNER.—Concurrently with the forty days' fast of the misguided American doctor, another fast has been in progress in our own country, for the truth of which I cannot say much. A friend of mine, who lives in Devonshire, left home some weeks since on a series of visits to his friends in distant parts of the country. A few days after he left, his servants wrote him that a favorite skye terrier was missing. My friend, after every search had proved fruitless, considered that the dog had been stolen. On his return home, after an absence of one month and five days, he unlocked the library, the doors and windows of which had been bolted and barred during his absence. He found the missing dog, and, to his surprise, crept into the light, a living skeleton, and totally blind. He was well cared for, and has now quite recovered his health and sight. But his existence was wonderful. He had had no food and no water, and had not gnawed the books or obtained sustenance from any source whatever.—Nature.

"THAT WASHINGTON LETTER."—*Jersey City Heights, Sept. 1st.*—Editor *Forest and Stream*.—In a late issue of FOREST AND STREAM Mr. Charles Lannan states that a correspondent thanks me for a copy of George Washington's letter in regard to bloodhounds. As a matter of fact, it is the editors of FOREST AND STREAM that state they are obliged to me for the copy, which, by the way, did not refer to bloodhounds, but to the Irish wolfhounds. I offered it as evidence as to the extinction of the species of dog called Irish wolfhounds. I copied it from a letter now owned by Mr. John Downs (not Dale, as you have it), of Washington, D. C., and I have the best of reasons for believing it to be an original letter of George Washington. Mr. Lannan says the original came into his possession years ago, but does not state that it never went out of it, which leaves me in doubt as to there being two originals. This I am quite willing to accept, however, as I do not recollect more than one "the only original" in New York city? R. T. GREENE.

NATIONAL AMERICAN KENNEL CLUB.—*Secretary's Office, No. 31 Broad St., N. Y., Sept. 1st.*—Field Trials of 1880, for Setters and Pointers, at farms of Col. A. G. Sloo, near Vincennes, Ind. Commencing Monday, Nov. 15th, 1880. Nov. 15th, Derby Stakes, for puppies born on and after April 1st, 1880, closed with 150 entries, \$5 forfeit; \$100 additional for starters; \$300 additional for first; \$100 to second; \$50 to third, with forfeit money divided to winners in ratio with added money. Nov. 16th, Free for all stakes, \$500—\$250 to first; \$150 to second; \$100 to third; \$10 forfeit; \$15 additional for starters; to close Nov. 15th, 1880, at 8 o'clock, P.M. Nov. 17th, Brace stakes, \$350—\$150 to first; \$75 to second; \$25 to third; \$10 forfeit; \$15 additional for starters; to close Nov. 16th, 1880, at 8 o'clock, P.M. Judges, Capt. Patrick Henry, of Graddy's Landing, Ark.; Theo. Morford, Esq., of Newton, N. J.; D. C. Burghental, Esq., of Indianapolis, Ind. Officers—President, C. H. Raymond, New York; First Vice-President, Luther Adams, Boston; Second Vice-President, Harry Bishop, Louisville, Ky.; Secretary, Chas. De Rongé, New York; Treasurer, Theo. Morford, Newton, N. J.; Executive Committee—Chairman, J. H. Deane, Columbia, Tenn.; J. H. Smith, Jr., of very plenty; R. C. Nichols, Battle Creek, Mich.; Capt. Pat. Henry, Clarksville, Tenn.; M. C. Campbell, Spring Hill, Tenn.

MONTREAL POULTRY, DOG AND PET STOCK ASSOCIATION.—We have received from Mr. J. H. Cayford, Secretary, Montreal, Canada, the prize list and rules for governing the special exhibition of the above named association which is to be held in Montreal, P. Q., on Sept. 21st, 22d and 23d. All entries must be made at the Exhibition Rooms, No. 235 St. James street, with Mr. W. E. Shaw, on or before Sept. 15th, on proper blanks, which will be furnished upon application. The dogs are divided into fifty-two classes, and the prizes are two dollars and one dollar, for first and second respectively.

NEBRASKA FIELD TRIALS.—As already announced in the FOREST AND STREAM, the Nebraska Field Trials will be run at Milford, eighteen miles west of the city, Sept. 30th, and Oct. 1st and 2d, the arrangements being under the direction of the Milford Sportsmen's Club. Frank Chickens are very plentiful, and there will be a good attendance and a good time during the trials. This is a good chance for Eastern dog men, to visit their Western cousins, and we trust that the trials will be a success in every respect.

—Waterbury, Conn., has been having a dog show of its own, at Messrs Briggs & Higby's drug store. There was but one entry, that of the beautiful litter of puppies belonging to the head of the firm. It took the first prize.

Poor Cricketer! "Say, Bill, do you call this game a cricke game? Why it looks more like a fish pond at hebb-nde, nor hit to play at cricket." This spoke a man of simple mind to me comrade, while through the air we seemed to hear sweet strains of music. The instruments seemed familiar, yet it was not the music of the vina, the kine, the crowth, the wolian harp or the banjo. We listened in beatific wonderment until the end—and the game of lava tennis was done. Thank heaven that there is no graceful writer like Miss Wrenn who would have written of my tall sails as follows: "For when the fervent authoress of *The Yellow Wallpaper*" wrote about "the manly game of cricket," she only spoke of the delightful and delighting power possessed by "a little bit of leather and two pieces of wood." The village green of her time was not prostituted to childish games; no guady effeminate males, adorned like embroidered tobacco pouches, twiddled to and fro, calling themselves cricketers—no! They were the first ball.

We will have the ball again after mature deliberation of about six weeks' time. I cannot "inveigle our heart that the swains in this part" are such wonderful performers with the cricket, but an ill ball, that they can forego practice altogether. Nor can we tightly stand by and see "the green turf which sucks the honi-

WEST-FIRST INSURERS
B A

composed of six 4's, five 8's, five 2's and singles. The Scotchman

shall look forward to a grand opening, and to a regatta on a scale of great magnitude. With the growing strength of the club, the

according to style and finish, and these, I think, are not high figures when compared with the cost of a good wooden canoe.

NEW YORK.
We believe Mr. Rushton has succeeded in building the lightest canoe on record—total weight, 15 pounds—from which we judge that on the question of weight there need be no material difference between canvas and wood. Our correspondent has overlooked the liability of canvas to cutting and ripping on sharp rocks. With the revival of canoeing there will be many improvements made in a few years, so that it is hard to decide in favor of any one kind as yet. Possibly both canvas and wood will flourish side by side.

Answers to Correspondents.

No notice taken of Anonymous Communications.

G. F. A., **Maith, Maine.**—1. The rifle is a first-class arm. 2. For run see our advertising columns.

J. E., **Montreal.**—The address you ask for is Lake George, N. Y. will, we think, reply to your request.

T. R. M., **Richmond.**—Write to Peck and Snyder, Nassau street, N. Y., for latest work on rowing and club rules.

C. N. H., **Lafayette, Ind.**—We do not keep track of pedestrians, and cannot tell of your present whereabouts.

S. L. S.—Apply a little sulphur ointment to the scratch on your dog's ear, and should that not heal it, write fully and we will reply at once.

W. D. M., **Port Indiana, Ind.**—The arns you mention are both good ones. The last named is new on the market, but we believe it to be a reliable arm.

—The one arm, one leg cricketers have been at it again in England. In a match recently played at Kensal Green the former won with ease—109 to 59.

"READER."—If you will have the politeness to give us your name we shall take great pleasure in replying to your questions to the best of our ability.

F. & Co., **Buffalo.**—No new edition of Kemp's "Yacht Describing" published yet. For new edition of his "Yacht and Boat Sailing" send to Manning's, 53 Beaver street, N. Y.

G. C. H., **New York.**—We can send you the papers, 2. Dr. J. A. Henshall, of Cynthiana, Ky., is writing a book on the black bass. Read the late papers on the subject in the FOREST AND STREAM.

G. R. S., **New York City.**—Go to Easthampton, L. I., and look up Charles Hounsas: he will show you plenty of quail, grouse and a few woodcock. During the first part of the season you will find the best sport.

ENGINEER, **Poughkeepsie.**—The Perkins boiler does not come up to the claims of Mr. Loftus Perkins. In England it is considered a failure, and only a hobby of an amateur. See recent issues of this paper.

W. H. H., **East Cambridge.**—Please inform me if there is a law in the State of Maine prohibiting the shooting of partridge from 1880 to 1881? Ans. No; but there is a law prohibiting the killing of this species before Sept. 1st, 1883.

M. D. C., **Asbury Park.**—Try for worms, areca nut, two grains for each pound weight of dog, administered after dog has fasted twenty-four hours, follow with castor oil. Give later on two grains of quinine three times a day and feed on good stimulating food.

G. W. S.—Much the best way to start yachts in a race is to give the gun a "running start" for a single gun, and not allow ten or fifteen minutes to cross the line in, unless you are sailing off so many boats as to make fouling a certainty. With this latter method the start is rubbed of all skill and maneuvering, and becomes featureless.

H. H., **New York.**—If a man buys quail, puts them on his farm and lets them breed, can he shoot them out of season? Ans. If he keeps them confined, he can no doubt kill them at any time, just as he can his chickens; but if they are allowed to go at large, we do not think that he would be permitted to shoot them. Certainly he ought not to do so.

Old Subscriber, **Harrisburg, Pa.**—The bird which you send is *Macrorhamphus griseus*, known to shore gunners as dowitch, brown back, gray-back, etc. An abundant shore bird along the New England coast. It occurs in large flocks during the spring and late summer, and affords good sport over stools. See articles on bay snipe shooting, now appearing in FOREST AND STREAM.

G. S., **New York.**—How far out on Long Island would I have to go to find good woodcock shooting; also quail, when in season? 2. What kind of shooting would I find around Kingston, N. J. Ans. 1. There are some woodcock about Islip and Sayville; and in the season excellent quail shooting near East Hampton. 2. About Kingston would I find quail, a few woodcock and some tufted grouse.

Friend, **Washington, D. C.**—Rub well the part affected, twice a day, with the following ointment: Powdered bicarbonate of potash, one ounce; powdered white vitriol, one-quarter ounce; sub-sulphur, two ounces; lard, eight ounces. Feed no meat. Give three drops of Fowler's Solution of Arsenic twice a day in food. Persevere with this treatment and it will produce the right result.

H., **Concord, N. H.** For worms, fast the dog for eighteen hours and give freely powdered areca nut, two grains for every pound of dog; to be followed six hours later by castor oil. We would suggest that you try some ointment as recommended to Flint in this column. Give no meat, and administer two drops of Fowler's Solution of Arsenic twice a day for food. Keep kennel and bed-die clean.

DALE HIGHLAND.—Can you give me the pedigree of Mr. James Gordon Bennett's dog, Don, now dead? I have been informed that Don was imported by Judge Bedford and sold to Mr. H. for \$2,000. Ans. Mr. Bennett's dog Don was purchased for him in England, but no proper pedigree was ever secured. He belonged to the jet blacks of Lord Ossulston's, now Earl of Tankerville's breed, Chillingham Castle, Wootton, Northumberland.

C. C., **Rocheater, N. Y.**—My black and tan, of the smallest kind, and now about ten weeks old, has had two very violent fits, frothing at the mouth, with violent convulsions. Is this a symptom of worms, or may it be the first stage of distemper? What can be done for him? Before he had the last fit he lay very drowsy and quiet. I have been feeding him with meat. What shall I do for him? Ans. Give no meat for a few weeks. Give a few doses of sulphur, and then a dose of castor oil.

J. J. J., **Winchester, Va.**—Please give me a recipe for glue to be used in making split bamboo rods and the kind of cane used, price, etc. Ans. The best white glue is used, "bone glue" as it is called, Norris used "Hilton's glue and cement," and found it good. The new fish glue, made of fish skins, by the Glue and Isinglass Company, of Gloucester, Mass., might be good, as it is one of the strongest glues we know of. Get the best Malacca cane; the rice can be obtained from dealers.

E. W. K.—For housing topmast, make the mast rope fast at one side of upper cap, reeve down through a sheave or dumb sheave in heel of topmast, then up through block on opposite side of cap and the end down on deck. Hang by this mast rope in small boat. In larger one use a "bale sling" half way up mast head, or an ordinary lid to cockbill by a tripping line. See Kemp's "Yacht and Boat Sailing," or examine yachts in commission. Have stays and shrouds so that they can be "come up" with and set up again readily.

PHILADELPHIA.—Eleven sloops and two cutters started from Glen Cove for New London on the N. Y. C. cruise. If the cutters are included among the sloops, as they often are, the twelve starters stipulated for in the bet took part in the run. In that case H. was, as Mischief was first boat to anchor in New London in her class. She was beaten by Regina only, but Regina belongs to the second class sloops. Mischief beat Genoa, the second boat of her class, on elapsed time as well as on actual time, without the time allowance due her.

M. M., **Ohio.**—My pug bitch puppy, five months old, has had two severe fits recently. She would commence running, all at once fall in a fit, yell terribly and froth at the mouth. In about ten minutes she would get over it and then would run around the lot as if she was frightened and blind. She would run against any and everything. What is the cause of it, and what will prevent these fits coming on again? Ans. Young dogs are very subject to fits, such as you describe. Give a few doses of sulphur, followed by castor oil. Feed properly and give plenty of exercise, and your dog will probably come round all right.

C. T. L., **Fryeburg, Maine.**—A puzzle-peg consists of a strong wood, such as ash or oak, attached to the neck by a leather collar, and to the jaw by a string tied just behind the tusks or canine teeth, so as to constitute a firm projection in continuation of the lower jaw; and, as it extends from six to nine inches beyond it, the dog cannot put his nose nearer to the ground than that amount of projection will allow of. The young dog should be well accustomed to it in the kennel and in the field, before he is hunted in it. This, and working a dog on overworked meadows, may in time accustom him to work with his head up. Teaching him to retrieve from or find his food on high places will, of course, assist in teaching him to feel for the scent in the air.

H. M. T., **Orleansburg, N. Y.**—My Irish setter pup, eight months old, is very weak on his legs and across his back, having scarcely any muscular control of himself, as if paralyzed. It is most apparent in his rear, his hind legs giving way under him when standing quiet, and when he attempts to run he falls down and rolls over. He has always seemed in health otherwise; is playful and full of high spirits, and, to my knowledge, has never been hurt. Any exertion renders him worse. Ans. Your puppy has chorea; of course, we cannot, from your description, give the cause. Treat him with tonics, such as quinine and nux-vomica, and twice a week give a little sulphur. Counter irritation along the spine is also sometimes serviceable.

TRAPELO.—My setter puppy has been afflicted with a disease that I do not understand. Two weeks ago she had a large bunch gather on her neck, which broke and discharged for ten days. Other sores have broken out, and are still discharging; in the mean time she has grown so weak as to be unable to stand. She has spasms and fits for two days, but somehow seems to live. The stench from the sores is almost unbearable. Three other puppies from the same litter, I have learned, are afflicted the same way. One has died and the other two are expected to die. What is the cause? Ans. Probably due to septicemia, or blood poisoning, but the description you give is not sufficient for us to determine the character of the "sores," which are probably abscesses. Write more fully and we will advise treatment.

J., **Baltimore, Md.**—I have two pug puppies now in their sixth month, one of which, the bitch, is very nervous and excitable, and the other is generally the reverse of this. Recently the bitch had three fits—I call them this for want of a better name—and the dog has had one. The fits are caused by a sudden opening or closing of doors; strange noises, as whistling, rapping on the gate,

etc. The fit consists in persistent running and barking, a disposition to get away from everybody and everything, and generally winds up by their creeping away in a corner. While the fit lasts there is more or less snapping of the jaws, and as it wears away there is considerable discharge of saliva. They appear perfectly healthy otherwise. Ans. The fits are probably due to a highly developed nervous system, possibly from too close in-breeding. Plenty of exercise in the open air in cases such as you describe, where the feeding is proper, is the best remedy.

A. W. B., **San Francisco, Cal.**—Does the cutting off of the last joint or joints of a dog's tail prevent distemper or other diseases? 2. What are should it be done? 3. What age must a puppy be before I should train him? 4. Why are double nose dogs considered better than single nose dogs? Ans. 1. No; although there is a superstitious belief to that effect. 2. Docking a dog's tail should be done after weaning. We don't believe in it. 3. A puppy should always be taught not to disobey. When he is six to eight months old you can house-break him, and two months later field-break him. See articles recently published on "Dog Breaking" in FOREST AND STREAM. They will give you the points. 4. Double nose dogs are not considered better than single nose dogs, any more than a man with a hair lip is considered better than one that is without one. The noses of double nose dogs are apt to become sore, as the dry grass is liable to draw through the division and cut them.

G. C. W., **Canada.**—On a certain cricket ground there is a tree which men the crescent. The umpire said that a ball was not dead until it touched the ground. I say it is dead if it touches the tree. Who is right? Ans. A ball caught from a tree, or glancing from a wall, or rebounding from a fence, a tent or anything that is above ground, can be legally caught. It would be better, however to have a local regulation against such catches, the striker being allowed so many runs instead, for in very few cases would such a catch have been made legitimately had the obstruction not facilitated it. This is only one of the absurdities of the laws of cricket.

F. W. M., **Summit, N. J.**—I purchased a gun about four years ago stamped "Walter Scott" (breach-loader). Has it any connection with W. & C. Scott? What do you think of the same? In loading shells with Curtis & Harvey's English sporting powder, is the same quantity used as American powder? and what number is proper to use for ordinary shooting? Ans. 1. The gun you mention is not the same as W. & C. Scott. It is probably a cheap English gun, but may be good. 2. Useless Curtis & Harvey—how much less depends on the size of the gun. If 10 or 12, half a drachm. For a breach-loader use a large size of powder.

ATHLETE, **Pittsburg, Pa.**—The fifth annual meeting of the National Amateur Athletic Association will be held at Mott Haven Sept. 25th. The best amateur records in England, at American championship games, to Aug. 1st, 1880, are as follows: 100 yards run, 10.1 5 sec., W. P. Phillips, London A. C. July 3d, '80; 200 yards run, 22.5 sec., W. P. Phillips, London A. C. Sept. 28th, '78; 400 yards run, 52.5 sec., J. Shearman, London A. C. June 7th, '77; half mile run, 1 min. 57.3 sec., P. T. Elborough, London A. C. Oct. 7th, '76; one mile run, 4 min. 24.1 sec., Walter Slade, London A. C. June 10th, '75; five mile run, 30 min. 24.1 sec., J. Gibb, London A. C. Nov. 24, '77; 120 yards hurdle race, 16 sec., C. N. Jackson, Oxford University, Nov. 14th, '75; one mile walk, 6 min. 48.3 sec., T. Griffiths, South Essex A. C. Aug. 6th, '70; three mile walk, 22 min. 15 sec., W. J. Moran, Atlanta R. C. March 24th, '75; seven mile walk, 53 min. 31 sec., H. Webster, Knotty Ash, April 7th, '79; running high jump, 6 ft. 2 1/2 ins., P. Davis, July 5th, '80; running broad jump, 23 ft. 1 in., J. Lane, Dublin U. A. C. June 11th, '74; pole jumping, 11 ft. 2 1/2 ins., T. Ray, Ulverston, Sept. 19th, '79; putting the shot, 42 ft. 5 ins., E. J. Bor, London A. C. March 27th, '72; throwing the hammer, no record according to American rules; throwing 56 pound weight, no record according to American rules; bicycle race, 2 miles, 5 min. 39 3/5 sec., Keith-Falconer Cambridge U. A. C. May 21st, '79.

FOREST AND STREAM.

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Advertisements. Inside pages, nonpareil type, 25 cents per line; outside page, 40 cents. Special rates for three, six and twelve months. Reading notices on editorial pages, 50 cents per line—eight words to the line, and twelve lines to one inch. Advertisements should be sent in by the Saturday of each week previous to the issue in which they are to be inserted. We cannot receive new advertisements, nor alter standing advertisements later than Tuesday morning.

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Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

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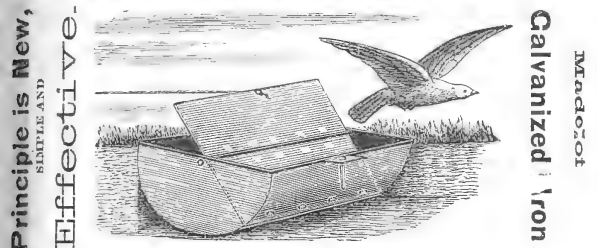
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THIS TRAP IS PLACED IN THE GROUND, the top level with the surface. When the cord is pulled one-half of the lid revolves within the Trap and DRIVES THE BIRD INTO THE AIR. Spennets will at once appreciate the advantages. Price \$4.

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ST. BERNARDS FOR SALE.—The undersigned, wishing to reduce his kennel, offers for sale several magnificent imported Mount St. Bernard dogs and bitches, carefully selected from the best European strains. To be sold for no fault. For prices, pedigrees, etc., address, Sept. 18, 18.

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Several handsome, pure red Irish setter puppies, whelped July 24th, 1880; sire, champion Rory O'More; dam, my red Irish bitch, Nora (champion Berkeley ex Tilly), winner first prize at New York, 1880. Prices: Bitches, \$30; dogs, \$35. Address C. H. DAYTON, Peckskill, N. Y. Sept. 11, 18.

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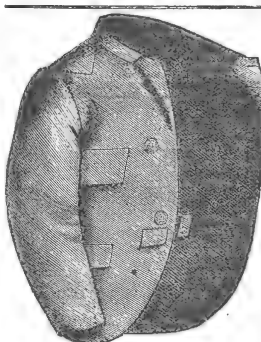
I HAVE moved my kennel of cockers to the vicinity of New York. Will have no pups before October. Cora, Flirt, Madcap, all to be bred to Bijou, this week, June 25th. GEO. D. MACDONOUGH, P. O. Drawer 432, New York. June 24, 18.

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OUTLET KENNELS.—For pure Cocker Spaniels of all ages—also in the stud, pure cocker Skin II, five and white, flat-coated, blue feather; will serve bitches at \$30; litters guaranteed. Address ROBERT WALKER, Cooper Outcote Kennels, Franklin, Del. Co., N. Y. June 17.

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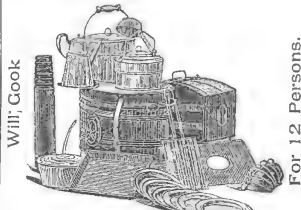
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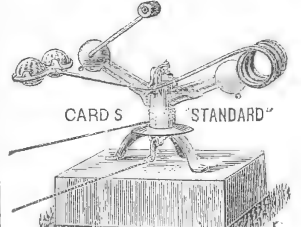


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LAKE RONKONKOMA.—One mile from Lakeland, L. I. The central resort of the island for shooting and fishing. The hotel will remain open during the fall. Terms \$1.50 per day. MRS. L. FINCH, Sep. 24. Proprietor.

LONG ISLAND R.R.—SPRING SCHEDULE. ULE, taking effect March 14th, 1890.—Leave HUNTER'S PET (Flatbush Ave., B'klyn, 5 min. earlier) for Babylon, 8:35 A.M., 3:35, 4:35, 5:35 P.M. Sundays, 9 A.M. Coll. Pt. & Whitestone, 7:35, 8:45, 10, 11:35 A.M., 2:35, 3:45, 4:35, 5:35, 6, 6:35, 7, 7:35, 9:15, 10:45 P.M., 12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M. Flushing, 6:35, 7:35, 8:45, 10, 11:35 A.M., 2:35, 3:35, 4:35, 5:35, 6, 6:35, 7, 7:35, 9:15, 10:45 P.M., 12:15 night. Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M. Far Rockaway, 8:35, 11 A.M., 4:35, 5:35, 7 P.M. Rockaway Beach, 11 A.M., 4:35 P.M. Sundays, 9 A.M. and 6:35 P.M.

Great Neck, 6:30, 7:35, 11:35 A.M., 4:35, 5:35, 6:35 P.M. Saturday nights, 12:15. Sundays, 9:35 A.M., 5:35 P.M. Garden City, Queens and Hempstead, 8, 10 A.M., 1:35, 3:35, 4:35, 5:35, 6:35 P.M. From Flatbush av. daily, except Sunday, and from Hunter's Point, Monday, Wednesday and Saturday, 12:15 night. Wednesdays and Sundays only from Flatbush av. 10 P.M. Sunday, 9 A.M., 1:35, 5:35 P.M.

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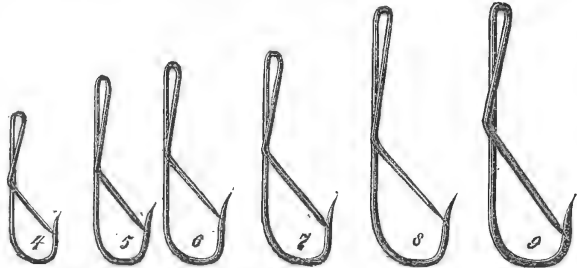
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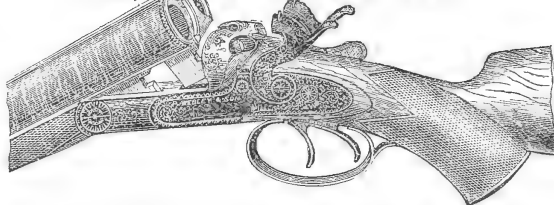
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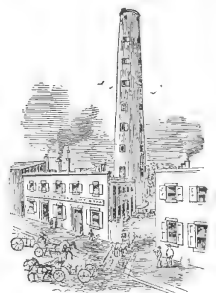
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THE AMERICAN SPORTSMAN'S JOURNAL.

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NEW YORK, THURSDAY, SEPT. 16, 1880.

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[Nos. 39 and 40 Park Row, New York.]

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FOREST & STREAM.

NEW YORK, THURSDAY, SEPTEMBER 16, 1880.

A GRAYLING DINNER.—It is not often that any one in this city has an opportunity to taste the grayling, one of the most delicate and delicious fish which American waters produce. *Thymallus* is found only in the waters of the Western British Possessions, in Michigan, and in the streams of Montana, and their appearance in the markets of the East is of very rare occurrence. In fact, it may be said that they are never on sale here, and are only known in New York when some enthusiastic angler brings or sends on a portion of his catch, safely packed in ice.

In delicacy of flavor, the grayling yields to no fresh water fish with which we are familiar, while for gamy qualities he is quite the equal of the much praised brook trout. We have caught in Montana, about the head waters of the Missouri River, many of these fish, and we have no hesitation in placing them in the very front rank of American game fish.

We had the pleasure last Friday of renewing our acquaintance, intermitted now for five years, with this beautiful fish. Messrs. Abbey and Imbrie, who had received from Michigan a number of grayling lately caught there by Mr. McMartin, invited a half a dozen veteran anglers to assist in demolishing the fish, and it was our good fortune to be present at the dinner. The grayling, which had been sent on packed in ice, were in superb condition, as fresh apparently as if they had been just drawn from their native waters. As to the company, no true angler but would have said to himself, "it is good to be here." We have caught in our day many fish in many waters, but the exciting stories that passed around the board of the capture of gigantic salmon, striped and black bass, and other finny monsters, made us feel that we were indeed but tyros with the rod and reel.

BAY SNIPES SHOOTING.

III.—BLINDS AND DECOYS.

IT depends very much upon the character of the place where you go, and the variety of birds which you intend to shoot, what kind of a blind or bough-house to build for your concealment. If on the edge of some large bay or broadwater, for general shooting a stand may be erected that will screen you while seated on a comfortable bench. But if you select some bar or beach where the birds come to feed at low water, or along which the willet fly, a box sunk in the sand is the most killing device. The box should be long enough to allow the gunner to lie in it comfortably, and its width should be several inches in excess of the breadth of his shoulders. From ten to fifteen inches will be of sufficient depth. It should be made of three-fourth inch stuff, calked and pitched on the outside and in, thus making it thoroughly water-tight. At one end, near the top, an iron staple should be clinched, to which a half-inch rope of about seven feet in length should be fastened. This will be found useful in towing the box behind a skiff, or for dragging it over the sand. A useful article will be found in an old spade. Should you find that large birds, such as curlew, marlin and willet, have a roosting place on one of the bald marshes, the box described above should be used, or if thoroughfares dissect the marsh, you can paddle your skiff, which should be painted green, up one of the drains toward the spot where the birds lower their flight, or circle over before alighting, and conceal it in the highest tuft of grass. Curlew, and especially the "jack," do not stool well where a blind has been erected. They are wary at best and wild when their favorite haunts have an unnatural look. Not so, however, with many of the other varieties. Willet almost invariably stool well, and both the marlins are unsuspecting. The large and small yellow-legs, dowitchers, robin snipe and lesser birds are readily called within reach, providing, of course, that the proper place has been selected. The bars and shoals are the favorite haunts of the black-breast plover, the willet and dowitchers, while the meadow pond-holes are the sure places to attract the yellow-legs, especially when the birds are traveling with the wind, or as baymen call it, a "free wind."

Blinds are easily constructed out of cedar boughs, cut about four feet in length, stuck in the sand or mud. They can also be made, when the wind is not blowing too hard, out of long reeds cut on the marsh. We have seen painted canvass screens, hinged so as to fold up, used, and one of Long Island's famous gunners once used an umbrella painted green, which served not only to hide his huge proportions, but kept off the fiery heat of the sun. The fact is, as we have said above, it depends very much upon the place, and, moreover, on the conditions of wind and weather where to stool. While a vast number of birds in their autumnal flight follow the irregularities of the coast, there are countless numbers who make their migration far to sea, or take short cuts over the mainland. Those passing to sea only touch at the projecting points, and are consequently tame, while those which have run the gauntlet of an even shore or beach are wild, and less likely to stool. All these things must be taken into account, and the wilder the birds the better you must be hid. Sometimes it is impossible or inconvenient to construct a box such as described, or find suitable stuff to build a blind; then a rubber blanket can be spread on the marsh, and a few sedge bushes or heaps of sea-weed placed around you.

The most favorable wind for bay snipe shooting in the summer and autumn is one that blows steadily from the southwest. The birds who are coming from the North, and flying against it, lower their flight and skirt the bars and meadows, and see the stools more plainly and decoy much better than when traveling with the wind in the clouds. A wet summer is also found to produce the best shooting, as the meadows afford plenty of feed, and should the birds arrive early in the season, they stop and make the large marshes their home, flying north in the morning and returning south toward even-

ing. The birds are then said by bay men to have established "a trade."

One great advantage in shooting in bays and broadwaters, where the tide rises and falls but a few feet or inches, is that the blind can be occupied by the gunner throughout the day, without the annoyance of being driven out at high water. Meadow ponds on this account are often selected, for although they do not afford the best shooting during the morning and evening flights, yet admit of a stationary blind being built from which more or less birds can be shot during the day, particularly when driven from the shoals at high water.

The decoys, or "stools," as they are called, are always to be set to the windward of the blind, and though twenty or thirty are generally used, we prefer to set out about fifty, as the greater the number the better the show to attract the flocks. The stools should be set in a crescent-shaped circle, with the heads of the decoys pointing to the wind. There are two reasons for arranging them in this way: First, all wild fowl light to the wind, as they need the resistance of the air; second, a flock of birds that intend to stool, drop down to leeward, where they circle and then draw in over the decoys. It is, therefore, not advisable, as a rule, to shoot at a flock passing over your head, as it will turn, and should it light it will do so at the head of the line of stools. It will thus be seen that as the birds check their flight to alight, they crowd and jostle together, affording the most killing results of a well directed volley into their ranks. There are various kinds of stools manufactured, such as both solid and sectional wooden ones, hollowed out; flat tin stools, cut out of sheet tin, and several years ago a patented tin stool was introduced on the market, that met with favor in the eyes of those sportsmen who cared little for expense. The latter are of very ingenious make, each half of the decoy being concave on the inside and convex on the out, thus representing one-half of a bird; the two parts are hinged together on the back, so that when shut they resemble a well formed snipe, and when open can be packed one in another after the manner of a nest of boxes, and occupy but little space. All these decoys are painted to resemble the different varieties of snipe, and are stuck up by means of sticks. Each set of stools should have sticks, or "legs," of two lengths—short ones when used on dry bars or very shoal water, and long ones when the water is deep. It should be borne in mind that stools set in the water are more readily seen, as their reflection and a watery background make them loom up and show to advantage. For wet stooing, the wooden ones are preferable, as the tin ones soon rust and become worthless. The objection, however, to the wooden stools is their weight and bulk. For plover shooting on the upland or dry ground, the tin ones are by far the best. It may here be said that shells, lumps of mud, etc., placed on sticks, often can be used when it is impossible to obtain the regular decoys.

It sometimes occurs, when snipe are making their flight late in the afternoon, that they are not inclined to stool well. They travel high, and often the decoys are so situated that the flocks run on to them without distinguishing them. In cases like these, a few scattering stools set away to the windward in the line of flight, even if they are stuck up in deep water, will draw the birds down in passing, and then, by judicious calling, the flocks can be worked up within shot.

THE CREEDMOOR MEETING.—With a promise of good weather the eighth annual fall meeting at Creedmoor is progressing at a rapid rate, and in our next issue a full report of all the matches will be given. The team entries were far beyond any previous year, and in the majority of the matches the contests promise to be very close without any breakdowns. In the All-Corners individual matches there are enough entries to make some close shooting necessary for the prize winners. When the regular entry list closed on Saturday evening last, leaving only post entries permissible, there were 213 entries in the Judd Match, with 152 in the All-Corners. The Champion's Match had 27, while there were 79 in that for the military championship of the United States. For the Wimbledon Cup there were 21 entries, including

such excellent long-range men as Adeb, Burnside, Buck, Todd, Farrow, Hubbard, Lauritzen, Cobb, Allen, David, Ratanoue, Day, Fisher, Lamb, Morse and Molness.

The team matches are, however, the feature of the meeting, and here the effort put forth was the best.

In the International Military Match, in which regulars are pitted against militiamen for the Hilton trophy, there are six entries. They are from the States of New York, New Jersey and Pennsylvania, while the regular army is represented in each of its divisions of the Atlantic, Pacific and Missouri by teams.

The Inter-State match for militiamen only will be fought between the States of New York, New Jersey, Pennsylvania and Connecticut. The Inter-State long range for clubs will be fought out by six teams, the Lion Club, New York, the Massachusetts Rifle Association, the Empire Rifle Club, the Amateur Rifle Club, the Pennsylvania State Rifle Association and the Connecticut Association being represented. In the *Army and Navy Journal* match, which is purely military, there are eighteen teams entered, and from among the commands of this State fifteen teams have been gathered for the State match. The First Division match, which ought to yield a strong fight among the nine regiments of the Metropolis, has three entries, the Seventh, Eighth and Sixty-ninth regiments only coming forward. In the Second Division match, for Brooklyn regiments, the showing is even worse, for the Twenty-third and Fourteenth regiments are alone represented. The Washington Greys have learned that if they run away they may live to fight another day, and the Cavalry State match is left between the Oswego and Harlem teams. Every club thinks itself capable of good short range work, and there are accordingly fifteen entries for the short range team match, while in the off-hand military team match sixteen entries will make up a lively contest.

Special efforts have been made to have a gathering of notables during the meeting, and with such a wide area of selection for the teams, the interest in the meeting is very general. Col. John Bodine is the executive officer for the first time, and he is assisted in his work by Col. Story, to whom the credit of the present fall meeting system of squadding and time schedules should be given.

ALONG THE SHORE.

SUMMER is the time for visiting the seashore. When the country only a few miles from the ocean, sheltered by the woods or the intervening hills, lies baked and shimmering under the August sun, breezes fresh and crisp as those of October blow cool from the broad Atlantic, and temper the intense heat till it becomes merely a delicious, languorous warmth. And what wonderful sights one may behold upon the wet beaches, provided he who visits them be truly an observer, and can appreciate the many curious forms of life that are to be found scattered far and wide along the water's edge.

Far away to the eastward stretches the intensely blue sea, sometimes smooth and smiling, clear as the sky above it, or again sparkling with white-tipped waves. That flash merrily in the sunlight and invite one to push off his bark from the shore and sail away toward the blue water beyond, where sea and sky seem to meet. Not less inviting is the roaring surf off the wide beach, where the giant rollers come pouring in in regular succession, each one forcing the retreat of the busy groups of beach birds, which turn on its reflux and hastily follow back the retreating waters. Behind us, to the westward, is the bay, backed by several miles of low marshes, intersected by numerous inlets, and beyond these meadows appear the low hills of the mainland, crowned with feathery pines and dotted with white farm buildings.

We recently visited the eastern shore of Virginia, and during the few days which we were enabled to spend along this delightful coast, enjoyed to the full its many charms.

We left New York one Wednesday on the steamship Breakwater, Capt. Gibbs, of the Old Dominion Line; a new vessel of about 1,000 tons burden, fitted up in a most comfortable, not to say luxurious style. The sail down the coast in such a vessel—so fast, so well-managed and with such pleasant officers—is most delightful, and we are sure that were it generally known that so pleasant an excursion could be made so quickly and cheaply, the Breakwater's passenger list would be a large one each trip. The traveler can leave New York at 3 P.M., and reaching Lewes, Del., early next morning, can spend the day there until 3 o'clock, when the steamer starts again for New York, which is reached before daylight on the following morning. At Lewes there is good fishing, and weakfish, spots, croakers and blackfish are caught in considerable numbers. At certain seasons the salt meadows are alive with bay snipe, and there is said to be fair quail shooting back from the shore.

From Lewes we took the Junction and Breakwater Railroad to Franklin City, Md. From this point a small steamer takes us to Chincoteague—famous for its oysters, its crabs, its terrapin, its bay snipe and its ponies. Here it is that the somewhat famous pony penning takes place each year; a performance, however, which, owing to the gradually lessening size of the herd, is

much less interesting now than it used to be. At Chincoteague we spent a short time at the excellent Atlantic Hotel, kept by Messrs. S. E. Matthews & Co., while the preparations for our trip were being made, and then having secured a small yacht, with Capt. Claval as skipper and a four foot darkey as steward, weighed anchor to spend a few days along the shore. Our ostensible object was to shoot bay snipe, but the event proved that we were too early for the birds, and no very large bags were made. Willets, dowitchers, great and lesser yellow-legs fell to our guns in goodly numbers, and a few curlew and marlin were killed, but there was no great flight, such as we had hoped for. The pleasures of the excursion, however, were such that we scarcely missed the shooting. With what lazy delight we dozed upon the deck in the warm sunlight while our lively little vessel skimmed over the waves. How interesting to watch the great schools of menhaden flashing at the surface of the water, while at intervals the triangular fin of a shark was to be seen at the edge of the mass, carrying terror to the crowded fish that were nearest to him.

During the middle of the day we sail from one point to another, the morning and the evening being employed in shooting. We set out our stools either along the beach, just out of reach of the surf, or else on the meadows at the edge of some little pond hole. It is better to shoot on rising water, as the birds, when they are driven off the flats by the tide, fly hither and thither seeking some feeding ground which is still uncovered. As a rule, large decoys are better than small ones, for the small birds are attracted by, and will alight to, large stools, but large snipe, such as curlew, marlin and plover, will not come to small ones. We have, then, a lot of curlew, willet, yelder and black-breast stools, and we marshal them in the most imposing fashion, so that the flock of fifty or sixty mimic bay snipe make a very good show. A hollow scraped out of the sand, if we are on the surf, or a bunch of tall grass, or perhaps some boughs cut from the low sand bushes, if on the meadow, form our blind, and we are soon snugly concealed. Before long the soft, mellow and long drawn out whistle of a black-breast plover, the ringing call of a jack curlew, or the harsh scream of a willet falls upon the ear and is answered from the blind; the birds draw near, and, seeing the stools, change their course and rapidly approach us. How beautiful it is to watch the wary jacks or plover high in air swing over the stools to leeward, calling at frequent intervals to their supposed comrades below, and receiving deceptive answers from the blind. At last they set their wings and swing down close over the stools, their long legs dangling and their bodies crowding together as they prepare to alight. We rise from the blind, the four barrels stow in quick succession, and the dead and dying strew the ground, while the survivors, with hurried wing-beats, rise in the air and start to fly off. Again the delusive whistle sounds from the blind, and if the birds are willets or dowitchers they will very likely swing round again and again until their ranks are sadly thinned. Sometimes a little flock of oyster-catchers (*Haematopus palliatus*) flies along the beach, uttering at intervals their short, sharp cry, and when it is replied to from the blind noticing and turning in toward the stools. They are wonderfully tough birds, and it takes a great deal of shooting to bring them down. These birds are called, along the Virginia shore, sea crows; for what reason it would be hard to say. In their liveliest of white and sooty brown, with their red bills and long, flesh-colored legs, they are as little like crows as any bird that flies. The thin compressed beak of this species is curiously adapted for being introduced into partially opened bivalve shells, and the shore men relate that when the bird sees a clam or an oyster with its shell part way open it steals up to it and quickly thrusting in the knife-like mandibles "cuts its heart." It probably cuts the muscles which hold together the two valves, so that its victim is no longer able to close its shell, and is devoured at leisure.

When there comes a lull in the flight we are at liberty to rise and stretch our legs. We light our pipes and recline at full length on the beach in the warm sun. At a little distance from us is a throng of the smaller beach birds—peeps, oysters and the smaller plover. They run busily about, some following the retreating waters and snatching savory morsels from the very surf, and others probing the wet sand until it is honeycombed with the marks of their bills. Among them are several birds very pale in color, which we do not recognize at once. These, on closer inspection, prove to be the Wilson's plover (*Egialitis wilsonius*), dainty little birds which are seldom seen as far North as New York. Occasionally one or two willets join the group of smaller birds and feed with them. They, too, probe the sand for food, thrusting their bills in up to the nostrils with action much like that of the Wilson's snipe.

As we sit waiting for the bay birds to come in we are critically inspected by all the feathered multitude that get their living along the shore. An osprey, whose fishing we have been watching with interest for some time, having caught a good-sized "spot" (*Lipostomus obliquus*), passes close over us on his way home, and whistles shrilly as he eyes us. The black-headed gulls (*Larus atricilla*) sail slowly along the beach, and when they pass us take

a circle or two about our heads in order that they may have a good look at us. Of the little terns there are half a dozen species to be seen. They fly restlessly about and are ridiculously tame. Sea swallows, they are well called, and few birds equal them either in purity and beauty of plumage or grace of flight. But they are cross and peevish little birds, and evidently think there is something suspicious about us and our stools, for as they pass backward and forward over us they utter complaining grating cries and sweep so close to our heads that we are tempted to throw at them some of the shells with which the beach is strewn.

The shearwaters (*Rynchops nigra*) or, as they are here called, skimmers or flood gulls, are not less tame. They would fly in low wide circles about us, so close that they were almost within reach of our gun barrels, constantly uttering their smooth low croaking notes, and eyeing us with an appearance of the greatest curiosity. Sometimes, after a long inspection from above, they would alight on the sand within twenty or thirty feet of our blind and stand there croaking for a few moments, when, if no movement was made to disturb them, they would sit down on the sand and doze until frightened away by our whistling or our shots. On the ground they are grotesque objects, but while flying they are beautiful birds, the black and white of the plumage being very striking, and contrasting with the bright red of the bill. They are called flood gulls, from the supposed fact that on a rising water they fly over one, calling loudly, but are silent at other times. We frequently, however, during our stay, heard them calling on the ebb tide. The reason for their name of skimmer will be evident enough to any one who has ever seen them feed. They flap slowly along over the water, the mouth wide open, the lower mandible immersed, and seem to feed indifferently over the open waters, the pond-holes and the tidewater channels that intersect the marshes. One that we watched for a long time was observed to follow a school of small fish, and his stomach, when opened, was found to contain two small minnows and several shrimp, besides a quantity of partially digested matter which could not be identified. It is highly probable, however, that the food of the shearwater consists largely of small crustaceans. We often saw them feeding in the late dusk, and heard their cries at midnight.

In the surf on the outer beaches of this coast there is often fine fishing for drums (*Pogonias chromis*), which are caught by a squid thrown from the beach, the fish weighing from twenty to seventy pounds. In many places the beaches are thronged with small sea crabs, which excavate for themselves deep burrows near high water mark, to which, on the approach of man, they betake themselves with great swiftness. They have short heavy bodies about the size of an egg, are yellowish in color, with short stout white "nippers." In many places the beach is covered with their tracks, which greatly remind one of some of the tracks on the Triassic sandstones of the Connecticut Valley. The drum fish are said to feed to a considerable extent on these crabs, which, we are told, they dig out of the sand at high water.

There is so much of interest to be seen about such a shore, where earth, air and water swarm with different forms of animal life, that it cannot all be compressed into one brief note. We should like to tell of the weakfish in the inlets, the softshell crabs and oysters of the shallow bays, the meadow hens which throng the marshes, and the delicious fruits of the mainland. Our pen floating airily from one topic to another should touch, too, with its light point the gigantic mosquitos of Wallop's Beach and the intense heat of one quiet moonlit night, which prevented sleep and made life for the time being a burden. There were of course a few drawbacks to the delights of our excursion, but on the whole it was full of pleasures, and its memories will long remain with us.

ANGLING CONTESTS.

THE angling clubs of London are much given to competitive angling of a sort which, we hope, will never be introduced in America, or, if so introduced, we sincerely hope they will be a short lived novelty. Nothing can be more foreign to the quiet and gentlemanly spirit of the angler than these contests. Imagine, if you can, the feelings of horror with which the "good old Isaac," or our own Norris, would view a crowd of men intent upon catching the greatest number of fish in a given time, for a plated cup or teapot! Surely this is the very opposite of the contemplative man's recreation, and places it on the level of those highly intellectual games played at rural fairs, as sack races, catching the elegiac porker, climbing the greased pole, and grinning through horse collars, or to gambling pedestrian matches and the like.

We would not include the very good custom of a prize or a supper to the captor of the largest fish in the course of an angling season, as we believe to be the custom of some of our American clubs, among the kind of angling contests under consideration, but refer particularly to the practice which has, within a few years, obtained among our English cousins, of going out in a party for a

day and fishing for dear life for a prize to be given for the greatest number of fish, paying an entrance fee and going at it like a race-horse, a practice which seems to us to be so foreign to the true angling spirit that we think they should be called fish-killing contests in place of the present title. Let any think we may have exaggerated what we speak of, we quote the following from the *Fishing Gazette*, of London, headed "Another Great Angling Contest," which says:—

On Monday last another of those great angling contests, for which Sheffield is so noted, took place at Crowle, near Thorne, South Yorkshire. This was the tenth annual match got up by Mr. Jarvis Sanderson, the host of the Crown Inn, Scotland street, Sheffield, and the house of nativity for Sheffield angling clubs. On this occasion Mr. Sanderson offered fifty guineas and nearly one hundred other prizes, the gifts of his friends, and from other sources. Being Hank Holiday there was a vast influx of visitors to this quiet little village on the Keadby Canal, the battle-ground of so many lake affairs in days gone by, and the rendezvous, the South Yorkshire Hotel, was once more the center of an unexcelled scene in angling, as it is generally understood. Some 700 or 800 followers of the gentle art were gathered together, mostly from Sheffield, but there were also many from London, Barnsley, Chester, Wakefield, Hull, Peterborough and distant towns, the bulk brought by special trains from the northward. Upwards of 370 paid the necessary entrance, three shillings, in order to compete, and the ground taken up extended nearly five miles from end to end. The weather, to begin with, was pretty favorable, but during the afternoon a heavy thunderstorm passed over the district and drenched the anglers not a little; but, like zood followers of old Lask, they stuck to their work as a rule, and went gamely on. After fishing nearly four hours it was found most of the takes were small. R. Brown, of Sheffield, outdid the others with five pounds and three fourths of an ounce; J. Rotherham, of the same place, being at his best with three pounds and thirteen ounces, and H. Barber also got three pounds and two ounces. The smallness of the takes, however, was accounted for as usual, by the fish not being on the feed; but it may be remarked that a wsg suggested that enough "ground bait" had been thrown into the water about here to take the fish all the season to consume. Whether that is so or not, it is possible the fish have got so used to fishing contests that it is only the foolish ones that can now be lured by ground or any other bait. There prevails a very general opinion that the water contains roach, bream, tench, chub, perch and eels in abundance, but the knowledge that pike is also very plentiful causes one's hand to shake the head dubiously. At all events, large or small "takes" are always welcome in a match at Crowle, and it matters little whether the aggregate is large or small.

We dislike fishing for count or brag in any shape; dislike to fish with a person who braggingly refers to his catch should it happen to be the largest in the party; dislike to have the question of beating come up in any shape to show that there is any spirit of rivalry in the company which, if composed of quiet, unobtrusive gentlemen (this in contradistinction to the noisy gentlemen), it should be, is entirely out of place, and it is questionable if it is good policy to publish the fishing score of a party when its only object appears to be to show who caught the most. There are conditions when a score appears to some advantage, as, when it shows that the fishing is good or bad in waters little known, or which have been recently stocked, but nothing can be in worse taste than to fish with a friend and then brag because you were either more skillful or fortunate than he, by the brag direct, speaking boastfully of it, or the brag indirect, publishing the score where your large figures make his small ones hide their heads, while you appear to be merely stating facts without the appearance of boasting.

Certainly the man who catches so many fish in a day that their number seems so great that one must apply his arithmetic to ascertain if it be possible, or to learn how many were taken in a minute, cannot have what an angler would call sport. The suspicion immediately arises that he used coarse tackle, and "yanked" or "snaked" them out, both these expressions are used by such people, and an angler would prefer an hour's fight with a salmon or a proportionate time with a trout, according to its weight, to the entire catch of the other, and we cry shame on the man who will kill his hundreds of fingerling trout or grayling just to brag of or "just to say that I killed them."

Lord Chesterfield's son appeared before him as black as a chimney sweep, and, in answer, said that he had been down in a coal mine. His astonished parent asked his reason for going into that dirty place. "Just to say I've been there," answered the son. "And couldn't you say so without befouling yourself by going?" was the next question. That is our idea; if it is necessary to say so, we would have just as much respect for Mr. Smallfuffer if he knew that he lied about it as we would if we knew that he had been criminally hogrish enough to actually kill hundreds of fingerlings which neither afforded sport nor food, for we have passed that age when we can believe it possible for a man to kill 200 fair trout in a working day of ten hours, and do it in a sportsman-like manner. Even if it were possible, what is the use? who wants to fish ten hours a day? Our idea of angling is recreation, and many a good day's enjoyment is remembered when the catch amounted to little or nothing, but the company and the surroundings were glorious, when the secrets of the untrodden forest were in part opened, and the wild duck led her downy young almost upon the boat anchored just around the point, or the mink was frightened at the sight of the infrequent man in his path.

The literature of angling contains nothing on the subject of contests until within a few years, and all its tradi-

tions are opposed to them, and unless a man is fishing for market, we do not see wherein the size of his catch has anything to do with his legitimate pleasure, unless he should catch an extraordinarily large specimen, when it is perfectly regular to publicly announce it, thereby establishing a fact concerning the size which it is possible for a fish to attain in a certain locality, but deliver us from the angling contest gotten up to attract custom to the bar of a public house. Our gorge rises at it.

GAME PROTECTION IN WYOMING.—Advices from Wyoming Territory give us reason to hope that before long a stop will be put to the reckless slaughter of large game which has for years been going on there. Up to within a short time there has been every prospect that Wyoming would soon be as bare of large game as is a large part of Colorado. But the formation of a game protective association, with some energetic men at its head, now seems to promise better things.

We learn from one of the most prominent members of this association that no efforts will be spared to convict every man who can be found killing game for any other purpose than to procure necessary food. We hope that this will be done, and if it is, the slaughterers will have a bad time of it. It is true that some who are innocent of any wholesale killing may suffer with the guilty. But at all events such action will tend to keep those who kill simply for the sake of killing, and to boast of their large bags, out of the country. We understand that special efforts are being made to convict a certain alien now in the mountains, and if these attempts are successful, we shall be glad to announce the fact.

We have no doubt that special attention will be paid by the game protectors in Wyoming to the skin hunter, that curse of the frontier, that has depopulated so many of the finest hunting grounds of the West of its hoofed game. No punishment is severe enough for these scoundrels.

THE GAME FISH OF TEXAS.—We earnestly request our angling readers to read Dr. Henshall's letter with the above title and paste it in their memories. We have wept over the confusion of names of the fishes, and are prepared to weep again as soon as the onion crop is harvested, over the persistency of local error. Dr. Henshall deserves the thanks of all lovers of angling for his efforts to set the nomenclature in the right groove, and we hope that our readers will assist him by using these common names. No matter if you have called a bass a trout all your life and it comes awkward at first to call it anything else, you were wrong; the usage of the civilized world is against you and says that no trout has spinous rays in its fins. If we had not wept so much over this subject we would try and wring a few tears out of our handkerchief over the pike perch that is called a "salmon" in the Susquehanna, Mississippi, Ohio and other rivers, but alas! even the handkerchief has felt the effect of the drouth and we await the pungent onion.

THE CANADIAN KENNEL CLUB.—We are heartily glad to hear of the formation of the Canadian Kennel Club, and have no doubt that it will, though young, attain before long a stout and vigorous growth. Certainly there is no reason why it should not be in every way successful, supported as it is by some of the best sportsmen and most prominent kennel owners of the Province of Ontario. We expect before long to hear more of the Canadian Kennel Club.

THE HABITS OF SALMON.—We would call attention to the very interesting letter from Prof. Hind, on this subject, in another place. It is very evident that there are some people in the Dominion who dislike to have the habits of salmon discussed, unless by some one who is in entire accord with their own preconceived views. We do not include in this category our own correspondent, "Stanstead," who respectfully differs with Prof. Hind, and asks him for proof of the statements which the latter has made. This is of course perfectly right, but it seems that others have allowed themselves to indulge in the silly practice of calling names, and personally abusing a gentleman who dares to give his views upon the movements of salmon, a course which never fails to injure those who practice it. We have no opinion to express concerning the merits of this controversy, and are not only willing, but glad, to give both sides a fair chance to express their opinions; merely asking that they do it in a fair and gentlemanly manner. In fact, when a person loses temper in an argument, they not only lose the confidence of the community in the justness of their cause, but create a suspicion that they have an object in keeping the truth from the public.

Discussions on this subject tend to throw light upon obscure points, and advance our knowledge of the habits of our fishes, and no man has any right to take offense at the expression of an opinion which differs from his. We do not pretend to understand the reasons which make some of our neighbors over the line so jealous of a discussion of a perfectly legitimate subject.

The Sportsman Tourist.

ROUGH NOTES FROM THE WOODS.

CAMPS IN THE WILDERNESS—HOW THEY ARE ORGANIZED, OWNED AND MANAGED—HOW THE OWNERS LIVE AND WHAT THEY LIVE ON—GUIDES, GUIDING, BOATS AND BOATING—A WORD FURTHER OF HOTELS AND HOTEL KEEPERS.

THE camps of the wilderness deserve a special notice. Their name is legion and they are increasing at a rate that defies calculation.

Let us start at the very foot of the Fulton Chain, not at the Forge House, but below, at the huge dam, controlled by the State, and used to draw off the lakes for public use, i. e., to feed canals, reservoirs and other State works, as may seem good to those in power. Passing through the marshy pond at the foot of First Lake, you enter the channel proper, now one and a half miles, and pass Indian Rock, the spot where "Old Foster" shot his Indian enemy, after a quarrel at the Arnold Place four miles below. Rounding the rock you have on your right evidence of the effects of civilization and progress. Stretching away to the dense green timber of what is now the mainland, there is a desolate waste of dead, decaying trees, lifting their bare broken arms toward heaven in ghastly protest against the arboreal murderers who tortured them to death by slow drowning. Motionless in the fiercest storm they stand with their dead heads and legs in the dull sedgey marsh. Almost imperishable, they have stood there for more than a generation, and a generation yet unborn will see the same ghastly sight. The sight is such a picture of desolation that, paddling down the lake by moonlight, I am careful to be always looking the other way. On the Woodhull lakes, on the Beaver, on the Oswegatchie and a dozen other waters, the same desolate sight pains the eye of any tourist or lover of nature who may chance to pass these wearisome "drowned lands." But more of this anon.

The line of dead "hop-poles," as they put it here, extends for about a mile, with a trend to the southward as you pass into the clear water of First Lake. Rounding the bend of dead timber you see before you, across the lake, a high pine-clad sandy point with a flag flying above the top of a tall thick pine. Below are buildings of some pretension. Two well-appointed log houses, one for the guides, cooking and dining, and the other for the family, men, women and children, to occupy. There is an excellent boat-house; another building is a good store-room and ice-house: the whole affair is well appointed, pleasant, hearty and costly. When I first visited "Camp Stickney" Doctor Nichol's party were in possession. They were employing three of the most experienced guides at a cost of \$45 per week and board. They were not eager anglers or hunters, but took their sport in a reasonable, gentlemanly way, and their ice-house was never without a supply of trout and venison.

Rounding the point on which Camp Stickney stands, you seat your left, half way up Second Lake, a poplar-covered sandy bluff. Passing this you come in sight of the Eagle's Nest, the most noted landmark on the Fulton Chain. The oldest guides could not tell me how long the nest had been there. For several years the birds deserted it, owing to the fusillade kept up by the cockneys of the Muggins tribe, who usually considered it the correct thing to empty guns and revolvers at the eagle's nest, occasionally hitting a young eaglet. The thing is better ordered now. With one exception, no one has fired at them this summer, and I saw them day after day as I was watching for deer, standing on the edge of the nest, flapping their callow wings and screaming for fish, which the parents brought them in quantities that made one a little curious to know just how many pounds of fish it took daily to supply that aerial camp.

Passing the Eagle's Nest, you have on your right another of those dreary wastes of drowned lands and dead timber, of which the only good thing you can say is that the dreary spot is a good place to float for deer in summer, and affords duck shooting in autumn. Turn to the left, leave the dead trees astern, and Third Lake Camp, or "Buell's Camp," is before you, a mile distant. It is an old camp, known to the guide books as the "Grant Clearing." It has stood for many years; has been occupied by more parties than I care to name, and is, to my thinking, as pleasant a site as any on the Fulton Chain. I made the acquaintance of the present owner, A. G. Buell, at the Forge House. He had come in simply to look after his property and go out again as soon as he could make some business arrangements. He was alone, and lonely. He did not like to cook; thought of going out in a deer or two unless he could raise company to stay with him. Now, I like to cook; can do it well, and I wanted a quiet place to lay off, paddle, fish, float and possess my soul in peace. Inference is obvious. I paddled up to the Third and became domiciled at Buell's Camp. It is one of the pleasant episodes I shall not forget. But this is digressing.

Every boat that passes up or down these lakes must of course go up or down by inlet or outlet, and they must pass directly in front of the Third Lake Camp. Passing up the inlet, it is about eighty rods from this camp to the foot of Fourth Lake, and passing along the northern shore of this lake, rounding a sandy point marked by a solitary dead pine, you come to the Snyder, or Cold Spring Camp. This is one of the high-toned camps, already mentioned, and to the southward, at the foot of the island opposite is the "Camp Chapin;" party consisting of two young men in the best of health, with consumptive tendencies. I stopped there several times, and found that their guide, Fred Rivet, was faithful in the performance of his duties so far as the supply of trout and venison was concerned, but I did not detect any coughs or other evidence of pulmonary difficulty. The vitals of the party seemed, to an outsider, all right enough. But I noticed a decided consumption of victuals, with some drink. By the way, it is claimed that the trout, or salmon, are larger and of better flavor in the Fourth than in the other lakes. And I may mention that the Chapin Camp guide stands "high hook" on the Fourth, with a salmon weighing twelve pounds as his record.

But a word for the Little Moose Lake. The largest salmon caught in these waters was caught on Little Moose, by a Mr. Miller. The fish weighed, by scale, twenty-five and one-half pounds, and was of excellent flavor.

It is not uncommon to see these great flights of night-hawks at this season of the year. The whippoorwill never migrates in a similar manner, we think.

ABOUT THE EUROPEAN CUCKOO.

THE method by which the female cuckoo (*Cuculus canorus*) managed to introduce her egg into the nest of the small birds, to which the duty of rearing the nursing is entrusted, was for a long time very doubtful, and the question was debated at great length among naturalists. The first hint as to the solution of the problem was accidentally made by Le Vaillant, who discovered on opening the mouth of a female cuckoo, which he had killed, an egg lying within the throat. A correspondent of the *Leisure Hour*, in a recent contribution to that magazine, gives the details of some observations made some years ago, which confirm the conclusions drawn from Le Vaillant's discovery, and which are in themselves very interesting. He says:—

"The following occurrence, which I witnessed, will explain how at last one cuckoo's egg was conveyed to the nest: In the month of June, 1857, I spent a few weeks at Farnham Royal, Buckinghamshire. Farnham Royal, which lies about four miles from Windsor, at that time consisted of a few scattered cottages, in the near vicinity of the well-known Burnham Beeches, and between the Beeches and the picturesque hamlet (by the way a favorite haunt of landscape painters) lies a stretch of scrubby, healthy common, through which several paths lead in different directions.

Strutting along the edge of the common one bright sunny morning I stepped aside to have a look at a stonechat's nest, which I had discovered three days previously, when it contained but one egg. This nest was placed in a thick plant of heath, about ten or twelve inches from the ground, well concealed by the heather, except one little open space through which the bird passed to and from her nest, and through this open space the eggs and its contents were visible. On my approach the hen bird flew off the nest, and I observed that four eggs were deposited. Two cuckoos were flying about in a most peculiar manner and one of them uttering peculiar sounds. Both of them seemed to be in a wild state of excitement, and my first impression was that they might have a young bird in some nest near by and that danger threatened it in the shape of a hawk, buzzard, or prowling cat, who cautiously approaching nearer them, I found that they were being mobbed by the two little stonechats. Sometimes both cuckoos would skim rapidly close by the nest, the cuckoos darting at them open-beaked, and uttering piteous cries the while; again they would fly off rapidly to the edge of a wood at a little distance, pursued by the male stonechat, the female always hovering near her nest and occasionally alighting on a bush close to it.

Could it be possible that the cuckoo had deposited her egg in the stonechat's nest, and was this the manner in which the owners expressed their resentment at the intrusion? Taking advantage of a longer flight than had yet been made, I ran toward the nest and saw at a glance that it contained the four stonechat eggs and no more. Presently back came the cuckoos, the one which I took to be the male (on account of the slightly richer color of the plumage) "cuckooing" in a wonderful manner, uttering the note much more rapidly than is usual, and the female swooped down very close to the nest, paused for a moment in her flight, and being vigorously attacked by the stonechats, glided past, but I saw that her bill was partially open, as though she carried something within her gape. Evidently her object was to reach the nest, and it was truly marvelous to behold the determination and courage of the little males of birds in their efforts to prevent her reaching it. It would be difficult to describe in mere words the wonderfully graceful action of both male birds during their aerial encounters, and indeed the flight of the cuckoo at times much resembled that of a small falcon.

It was about half past 10 o'clock when I had first come on the scene of action, and I watched till the forenoon was well nigh past, was meditating on the expediency of securing the cuckoo in the last, when the female flew up quickly and came down on the ground very near the nest, but on the farther side of the heather clump in which it was placed. At the same time the male cuckoo made a hasty swoop toward the nest, was driven off by the stonechats, and while they were thus engaged the female cuckoo, with rapid action, darted forward, alighted on the heather, thrust her head and neck through the small opening into the nest, in an instant withdrew and soared aloft, uttering for the first time a cry—not "Cuckoo! Cuckoo!" but a gurgling, water-bubble kind of note. Her mate immediately joined her, and the two soared away to the wood, he joining in the shout of triumph with fond "Cuckoo." In a few moments I had run forward to the nest, and behold lying beside the four pretty little stonechat's eggs was a beautifully marked cuckoo's egg, still wet with the saliva of the mother bird.

The stonechats reared their young in peace and safety, but that cuckoo's egg lies before me as I write, and the sight of it recalls one of the most interesting episodes I ever met in bird life.

IOWA LAKES.—Capt. J. K. Powers, Register of the State Land Office, gives the size of the Iowa lakes as taken from the office plats:—

First Lake covers.....	5,591 acres
Second Lake covers.....	1,231 acres
West Okonjoi Lake covers.....	4,900 acres
Clear Lake covers.....	3,910 acres
Spirit Lake has a shore line.....	31 miles

MARKED SALMON.—There are many instances of marked fishes, and especially of salmon, being caught, but for singularity in marking we find the following, which has been in the rounds of the English press. It is fully equal to anything which we remember to have seen. It is headed "Marked salmon at Berriedale, Cathness," and relates that recently the salmon fishers at Berriedale found in one of the bag nets, among other fish, a fourteen pound salmon bearing the following marks: On the flat, smooth part of the head, behind the eye, and immediately over the gills, a branded mark comprising the letters B.B. in a diamond shape, with a star in the middle. A line was drawn around these letters in the form of a square border. Immediately under this was a mark which rudely resembled the outline of a salmon's head, filled with dots and streaks.

Fish Culture.

DOCTOR GARLICK'S BOOK.

WE have just received the second edition of Dr. Garlick's work on fish culture and angling.* A handsome octavo of 128 pages, illustrated with cuts of manipulating a spawning fish, ponds and a series representing the development of the embryo from impregnation to hatching, printed in clear type on excellent paper.

Our fish cultural readers who are conversant with the art from its infancy know the venerable Doctor as the original American fish culturist, now in his seventy-fifth year, who has been infirm in all but his mind for years, and will welcome his new edition as an addition to our fish cultural literature, the first edition (published in 1857) being now out of the market. It is very interesting to read of the early trials of the Doctor and his friend, Prof. L. A. Ackley in 1853, twenty-seven years ago, stimulated by the success of Remy and Gehin in France, and by the translation of W. H. Fry, of what had been done in the Vosges. The first attempt was naturally made with the brook trout, happening on the 21st of November, and was a success, and the delight of the experimenters may be imagined when they placed some of the eggs under a microscope on the 9th of January and found them to contain embryos far advanced.

Figures of different modes of hatching on a small scale are given, and one (page 28) of an arrangement whereby a cheap experimental hatchery can be arranged in a house or office. Being mainly a reprint of his older work, the Doctor cites instances of hatching and transporting eggs and fry, as done in France in that elder day before the great work was begun here by the Government and State Commissions, as well as our private fish culturists, but in the new chapters which have been added he has a good word to say for the plebeian catfish, and also for the German carp, introduced by the United States Fish Commission, devoting a chapter to the latter, which he concludes by saying: "I will close this chapter on the carp by saying that from a careful perusal of Prof. Baird's Fishery Reports, I am entirely satisfied that I may say of this fish as Horace Greeley said of Concord grapes—it is the fish for the million."

The angling portion of the book gives no notice of the black bass, white bass, and other fresh water favorites, and in conclusion he says under date of Bedford, Ohio, Aug. 10th, 1877: "In concluding the second edition, I will only add, that since publishing the first edition of this work, I have lived to see my hopes in relation to fish culture nearly, if not quite, realized. I am now over seventy-two years of age, and probably this is the last that I shall ever have to say to the public on this subject. I have spent much valuable time, and some thousands of dollars to promote this branch of industries. If I have in any way promoted the object, I am satisfied, as I never wished nor hoped for any pecuniary reward."

*A treatise on the Artificial Propagation of Fish [with description and habits of such kinds as are suitable for domestic culture.]—[By Theodorus Garlick, M. D., Member of the Kirtland Society of Natural Sciences; member of the American Microscopical Society of the city of New York, and of the Western Reserve Historical Society.] Second Edition. (enlarged.)—[The laws of Nature are the thoughts of God.]—[Foreword by the Society of Natural Scientists.] Cleveland, Ohio, [Cleveland, Ohio, J. B. Savage, Printer, Franklin street, 1880.]

HOW THE FIRST SHAD WERE HATCHED.

ROCHESTER, Sept. 6th.

Editor Forest and Stream:—

In your issue of Aug. 26th I notice a communication from a correspondent on "Shad Hatching and Shad Laws." There are a few points on which he has been misinformed in connection with my early experience in shad hatching which I wish to correct. He states as follows: "Mr. Seth Green was employed, I believe, by both National and State authority to make the experiment. After exhausting his fund of experience and other knowledge in connection with the experiment, Mr. Green made a failure of the attempt, and packed his boxes, intending to return home next day. In the meantime he had shad fishermen, well known at the falls, besought Mr. Green to let him make a trial. The boxes were unpacked, and the fishermen placed them in a tributary of the river and the experiment was an immediate success. I believe Mr. Green received the credit. The locally accepted reasons for Mr. Green's failure and the fishermen's success were that Mr. Green's experiment was made in the warm water of the river, which was very low at the time, while the fishermen's experiment was made in the cooler water of the tributary."

The facts of the case are that I went to South Hadley Falls at the solicitation of the New England Fish Commissioners and at my own expense, with the understanding that I should be remunerated if I made a success, and if I did not they were to hear no more from me. As is well known I did make a success, but the New England States never paid me within \$15.54 of my actual expenses, to say nothing of my loss of time, and it is admitted that my discoveries have been and are worth many thousands to them annually.

In regard to the old fisherman, of whom I have never before heard, making the success, your correspondent is mistaken. All any of the fishermen ever did for me while I was experimenting was to destroy my experiments, break my boxes, boot at me, and, in fact, did everything they could to discourage and drive me away, and when I hit upon a plan which I felt sure would, and which did prove a success, I was obliged to watch it day and night to protect it from the ravages of the fishermen.

In regard to the stream mentioned, I tried the experiment of hatching shad in it, but was unsuccessful, the change of temperature being too great from the river water, and the only shad that were hatched successfully were hatched in the river and not in the stream. I should be pleased to learn the name and address of the old fisherman, and hope I may be favored with it.

Your correspondent is right in regard to the place for hatching shad. It should be done in the upper waters. I do not think that any attempts to hatch them at the mouths of rivers will ever prove a success. There should be a close dam two or three miles back to allow the shad to get up to their spawning grounds.

The fishing could not be equalized in the way mentioned, as the lower river fishermen are about through when the upper river fishermen commence. The fishermen at the mouth will always catch the most, because they have the first chance, and the upper river fishermen can only expect to catch those which escape their nets.

SETH GREEN.

MR. THOMPSON'S TROUT PONDS ON LONG ISLAND.

THE Brooklyn Eagle gives the following account of the trout preserves and ponds on Long Island:—

On the 1st of September the trout season of 1880 on Long Island ended, and until March, 1881, the speckled beauties of the lake and stream are to be left undisturbed in their cool retreats, while the anglers will enjoy relating their experiences of the past season, and the trout breeders will begin to prepare for their approaching fishing season of the year. And just here comes the query. Have you ever visited a trout-breeder's fish farm? If you have not, do so before the cold weather sets in, and you will see something worth a day's journey to witness. Of all fresh water fish, trout are the gamiest, pluckiest and finest fish that swim. They are the delight of the angler, as they give him the greatest sport he has with his rod and line. Then, too, they make the delectable dish of fish that can be set upon the table. Hence, trout are in great demand, alike by the angler and the epicure.

Long Island abounds in trout. The Island lakelets, ponds and running streams have been the resort and the home of trout since time unknown. Of late years trout breeding has become quite an important occupation on Long Island, and now the culture of trout, from the ovum to the adult fish, is carried on to quite a considerable extent, from one end of the Island to the other, beginning with Furman's Trout Breeding Establishment, at Newtown, and ending with Thompson's model trout farm at Noyac, near Sag Harbor. The business is carried on very successfully, and the result is the growth of thousands of fish not only suited to replenish exhausted streams or to supply private trout ponds, but to answer the growing market demand for Long Island trout, which now have the preference over the product of every other fish-breeding establishment in the country. Probably the most successful cultivator of the speckled beauties on the Island is Mr. Furman, of Newtown; but he bids fair to be rivalled by his friend, Mr. George Thompson, whose most picturesque trout farm, located at the head of Elder's Cove, near the old Indian village of Noyac, N. L., about four miles from Sag Harbor, is beyond question the most beautiful locality of the kind in the State. Mr. Thompson is an old California pioneer, one of those choice spirits of the gold-lined coast who know no such word as fail in anything they undertake to accomplish.

From slow, sluggish streamlets passing through an almost impenetrable undergrowth of wild shrubs and tough brush has come a series of pretty little lakelets and clear running streams, in the midst of which stands his cottage homestead, around which are beautifully laid out flower gardens. Beyond these are located the hatching houses and rearing boxes of his trout farm, the whole forming a place for the cultivation of trout from the germ of the fish to the lively young pond trout, ready either for the angler's rod or for the epicure's feast at the table. The front view, looking from the garden lawn near the cottage, presents a very picturesque landscape, the pretty sheet of water forming the mill pond being ended by a background of the waters of Noyac Bay. The whole farm is shaded by the familiar "tall oaks from little acorns grow," and brightened by the "music of the water" in the bubbling and swiftly running streams in which the trout revel and delight. The farm, with its rare taste for gardening, has made the place a perfect picture.

Let us examine a little into the details of the various processes employed in raising young trout, from the germ, to the full grown fish. We will suppose the trout spawn to be placed in the nest assigned for it in the hatching house, and the embryo fish have been developed from the egg to the young fish swimming about with its sac of food attached to it, on which it lives for a time, looking somewhat like a young tadpole, though not so fully developed, in each nest at the long row in the trough of the hatching houses at the farm there are from two to three thousand trout, all alive and swimming about in a running stream of cold spring water one foot deep, in which it ripples over a smooth bottom. From the time the trout are hatched to the period the trout begins to look out for itself forty-five days elapse. In the interim the young fish is fed from its yolk sac, which is, during this time, a part of itself. When this is removed by its falling from the body of the fish—at this time not more than half an inch in length—the young trout begin to work for food from the pond, and to eat from the water. By this time they have grown to about three quarters of an inch in length. These youngsters are very tenacious of life. They have been known to have survived in a deep well for over a year without other food than the well water alone supplied. Trout are a very voracious fish, and even in early trouthead develop cannibalistic propensities, large trout living upon small trout, while parents will frequently devour their offspring. The male trout having quite a fancy for the young fish when very hungry. From the hatching troughs the young trout are transferred to the rearing boxes, and it is in these that their artificial training begins. One would imagine that the young trout under the incentive of the process of regular feeding on a fish

far, would, "like weeds, grow apace;" but the young cascades take their time, and plenty of it, in growing to years of discretion; yearling trout range only from two and a half to four inches in length, and it is three years before they reach the size suitable for the angler's purpose. All this time constant care in feeding, watching and caring for them generally is necessary, and, consequently, time becomes so much money to the trout breeder, as much so as it is to the city merchant. Hence, the breeder's stock of fish becomes expensive to him in proportion to each year's growth. Seventy-five days of time for the hatching process; forty-five days for the fish to enter upon the period when it looks out for itself in the watery world, and then a year's growth added before it reaches a length of five inches, shows very plainly how laborious and costly the business of trout breeding. From the rearing boxes the young trout and trout are let into the little lakelets of the farm, and there are collected according to their age. From these in time they go to the larger ponds or reservoirs, where they are held for use as occasion may require.

CARP GROW RAPIDLY IN FLORIDA.—*Rivford, Fla., Aug. 5th*.—*Prof. Baird*.—Dear Sir: It will doubtless be a pleasure to you to learn that the carp you furnished me with last November are doing finely. I ascertained on my return from Savannah with them, that my pond was a very good one, and that the fact that there were many more black bass in it than I had expected. I accordingly confined the carp in a pen at the side of the pond, giving them water through holes in the side covered with wire netting. A few weeks since I discovered that a portion of the netting had been misplaced and some of the fish escaped. I immediately closed the pen and put them all into it, as I had nearly all the bass out. Their growth since that time has been simply marvelous. Many of them are ten or eleven inches long, and I feel certain they will spawn this fall. Will it be too much trouble for you to send me a few eggs of the black bass? I would like some other varieties when they spawn? Will you send that they seem quite tame and come to the place where I feed them as quickly as a drove of pigs would come for corn, whenever they find I am there. I am confident that you will grow a large number of the black bass of the South, and I shall be glad pleasure in distributing them as soon as they propagate. Very truly, yours,

GEO. C. REXFORD.

Mr. Rixford also writes us as follows:—

It may interest some of your readers to learn that the German carp are thriving splendidly in our waters. Last November I received a lot from Prof. Baird, which I think were then from three to four inches in length. They are now from ten to twelve inches, and appear to make a visible growth from day to day. I think they are the greatest addition to our food fishes that has ever been made.

SALMON CULTURE IN MAINE.—We learn that there are four hundred fine breeding salmon in the breeding pens of the United States Fish Commission at Bucksport, Maine, which is under the care of Mr. Charles G. Atkins. They are the so-called Penobscot salmon, *S. salar*, and are said to be in fine condition for yielding a fair crop of eggs.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN SEPTEMBER.

FRESH WATER

Grayling, *Thymallus tricolor*.
Lake Trout, *Salmo namaycush*.
Maskalouge, *Esox nubilior*.
Pickerel, *Esox reticulatus*.
Pike or Pickerel, *Esox lucius*.
Pike-perch (wall-eyed pike)
Stizostedion americanum, s.
griseum, etc.
Yellow Perch, *Perca fluviatilis*.
Striped Bass, *Morone lineatus*.
White Bass, *Morone chrysops*.

SALT WATER

Sea Bass, *Centropristis striatus*
Sheepshead, *Achoerodus ruber*
Cape Mackerel, *Scomber capensis*
Porgie, *Scorpaenopsis argyrops*
Grouper, *Epigonus telescopus*
White Perch, *Morone americana*
Spot, or Ladyfinger, *Leiostomus xanthurus*
Striped Bass, *Morone saxatilis*
Spot, Kelpfish, or Channel Bass, *Sciaenops ocellatus*
Tautog, *Tautoga onitis*
Policia, *Pollachius carbonarius*

HABITS OF AN OREGON SUCKER.

ASTORIA, OREGON, *July 6th.*

THINKING you might like to receive an account of a very curious fish found in these waters I send the following, being the substance of a report made to the U. S. Fish Commission, at whose request I was serving its habits and collecting specimens. The fish in question has a length of eight to ten inches, is of rather slender form, has a long and pointed head, large eyes, large scales, and deeply forked tail. Its mouth, when shut, is small, less than a half inch in length, but when open, to the respect, forming a round sucker-like mouth, being slightly longer than wide. The body is brown on the back, with the under parts of a yellowish white. The sides are striped with black and pale silver, the stripes with a single narrow stripe of bright orange running from the lips to tail. A line of orange also runs around the edges of the gill covers. Altogether, there is nothing very strange in its appearance, and economically it has no value. It is not known whether it comes from the mouth of the Columbia River, though the latter is thought to be the case. It comes in the streams early in July for the purpose of spawning, seldom going more than a half mile above tidewater, and its visit is confined to two weeks in duration. I do not know its scientific name, and it is quite possible that it has never received one. Locally, it is known as the "sucker." I had found

few in a visit made a week previous to the one of which an account is given. They were found on this trip on the south fork of the Klaskan, a quarter of a mile higher than a week ago. The first intimation I had of their presence was the sight of several dead and partially caten fish on the bottom of the stream, the work, doubtless, of some hungry minnk or otter: then at some distance above saw them leaping from a large pool, so many of them that there would be a dozen in the air all the time. The pool was about thirty feet by twelve, and in the middle was six feet deep, its upper end terminating in a long ripple. The water was clear, light blue, just level with the surface of the water, an old grassy log. Walking on this to where I could look down into the water, I saw such a sight as I had never seen before. I will not say that the pool was solid full of suckers, for that would be more than the truth. To say that there was a half dozen for every cubic foot of water in the pool would probably be more than the truth. Making my way to the head of the ripple I baited my hook and allowed the current to drift it under the log. It was taken instantly, and I was so fortunate that I knew a ten inch sucker was incapable of, and unfit for, such a feat. The pleasure of landing a fine salmon trout (*Salmo clarki*) upwards of a foot in length. Looking now to the opposite side of the ripple, where the water was shallow, I saw a mass of suckers entirely covering a space of six or eight square yards. Dropping the hook among them, after a few minutes I succeeded in catching one, and so continued until I had taken a dozen, when finding this method too slow, I allowed the hook to sink among them, then, by giving a sharp twitch, I would generally succeed in pulling one in the bag. In this way I got some forty or fifty, as many as I thought would be wanted for smeltens.

I now started up stream, intending to spend the rest of the day in trout fishing, but found I was not so near down with the suckers as I had thought. They had preëmpted the stream for a quarter of a mile. In one place, where the water spreads out forming a large shallow basin with gravelly sides and bottom, they had collected on one side of the stream in yards by ones or two broad, piled upon each other, and on the other side of the stream, where the water—entirely out—a solid, quivering, quivering mass of fishes. Stepping down beside them, I began with both hands to throw them upon the bank, and had I wished I could have thrown out bushels. In the quarter of a mile that they had possession of the stream I saw several such masses, and supposed that they were crowding above the shoals, and that the heat of the sun, which now shone bright, but found no heat of the water, which when the sun was below the tree tops and the air quite cold, that even more of them were in this position.

I found one place where the presence of several partly eaten fishes showed that even an otter had failed to drive them away. I am informed that large numbers of these fishes—less than half of the season's run, but a great many—crowd themselves ashore after spawning and die there, and I have no doubt these were performing the last act of their tragedy; the only instance, so far as I know, of suicide among fishes.

It must not be supposed that these fishes were sick or weak, or in any way incapable of continuing the struggle for existence. On the contrary, they were plump and strong, and apparently as capable of supporting the ills of their existence as any of their relatives in the deeper waters.

It is a singular fact that so many of the fish of this coast should die immediately after spawning. The smelt (*Osmerus pacificus*) and the quinnat salmon are cases in point. The fact in the case of the salmon can be accounted for, but in the case of the smelt the immense distance he has to go to reach the headwaters of the river, and the hardships of many kinds he must undergo, and all without food, for the *oncorhynchus* do not feed in fresh water, must tell fearfully upon his vitality. But the smelt goes only a hundred miles inland, and the sucker does not half a mile from tidewater. The latter comes from the ocean.

C. J. SMITH

THE GAME FISH OF TEXAS.

Editor Forest and Stream :—

In your issue of July 19th, I notice a communication from "Bexar," of Corpus Christi, on the game fish of Texas. "Bexar" is correct as to the black bass, croppie and wide-mouthed perch, all of which are very abundant in Texas waters, but whether the rock bass is an inhabitant of that State I cannot say. It has been taken in Louisiana, but I know of no instance of its being found so far South as Texas. There are two species of *Pomoxys*, both called "croppie" or "crappie" in certain sections, but I think but one species (*P. umbrinellus*) exists in Texas. I will give brief descriptions of these several species for the information of any who may be in doubt as to the identity of any or all of them.

LARGE-MOUTHED BLACK BASS.—*M. pallidus* (Raf.). Gill & Jordan. This is, as all know, the so-called "trout" of Southern waters. It is the game fish *par excellence* of the Southwest, and a further description at this time is unnecessary.

WAR-MOUTH PERCH. *Chenobrythus gulosus* (C. & V.). Gill. "This is the fish alluded to by *Esopus* in the "wide-mouth perch," and which is a very good name for it, the etymology of its generic name being *chamo*, to yawn or gape; *brutus*, sunfish, and its specific name, *gulosus*, big-mouthed; literally, "wide-mouthed gaping sunfish." It has a mouth very similar to the black bass, with the same close and closed lips, and the radial formulae of its fins. It has a robust body, with a head of length; broad forward, compressed behind; nape depressed; a depression over the eye; the snout projecting, forming an angle; fins rather low, with stout spines; teeth on jaws, tongue and palate; scales large. The opercular spot on flap at the end of gill cover is as large as the eye, and the operculum is of copper color. There is another species of *Chenobrythus*, called *viridis*, from the Atlantic States (*C. viridis*), somewhat smaller and slenderer, and is likewise called "war mouth," also "breem."

CALICO BASS.—*Pomoxys nigromaculatus* (L. S.), Girard. This fish is also known in various sections as "grass bass," "silver bass," "strawberry perch," "goggle-eyed perch," "razor-back," "croppie," "chinkapin perch," etc., all of which are more or less expressive, though I think the latter the most distinctive and ex-

pressive of its specific name (black spotted), provided every one knew what a "chinkapin" was.

Body nearly oval, half as deep as long, much compressed, arched, thin both at the back and belly; snout projecting, forming an angle; mouth moderately large, but smaller and tougher than the next species (*P. annularis*); fins very large, anal fin larger than dorsal. Blackish, or bluish green on back; sides and belly silvery; marked with dusky blotches, as if made with the ends of one's fingers.

CRAPPIE.—*Pomoxys annularis* (Raf.). Also known as "bachelor perch," "new light," "Campbellite," "finmouth," "silver perch," "speckled perch," etc. It is very similar to the last-named species, though is scarcely so robust, and not so deep; has a larger mouth, which is quite thin, white and transparent, hence the name "finmouth"; it is more silvery, or white, in appearance, and the dark spots on back and sides are smaller, and the fins are not so variegated as in the other species.

This, I think, is the species so abundant in Texas. Both species are handsome fishes, though not very "gamey."

ROCK BASS. *Anabloplites rupestris* (Raf.). GILL. A well-known species, very generally distributed west of the Alleghenies, and also known as "red-eye" and "cozgle-eye." It is a good pan-fish and quite "gamy." Body deep, or more than twice as deep as high, with a length as much as the "war-mouth." Depth about 1/3 length; head and mouth large; eye very large, iris red; front, or face, convex; color, brassy-olive, with golden-green and dusky markings; a dark spot at base of each scale, giving a somewhat faintly striped appearance, which is conspicuous after death. Dorsal fin larger than anal.

The above-named species all belong to the family *Centrarchidae*, which is composed of percoid fishes with a single dorsal fin, either continuous or deeply divided, with from five to thirteen spines, or thorny rays; anal fins with from three to thirteen rays; pelvic fins ventral, with one spine; body oblong, spindle-shaped, compressed, and sometimes much compressed; some with a more or less prolonged flap at the end of gill-cover (opercle), and nearly all with a black spot, larger or smaller, on the side; mouth oblique; villiform, or velvet-like teeth on jaws; vomer and palatine bones on tongue, present in some, but absent in other genera.

The "war-mouth" is especially distinguished by its large mouth and robust appearance; and the "croppies" by the very large anal fins, being larger than the dorsal.

As the species above described are readily distinguished by the number of spines and rays in the dorsal and anal fins, it is not necessary to give a formula, with the remark that all of the spines must be branched or forked, except the short or rudimentary first ones may be, and that where the last soft ray is branched or forked it is to be counted only as one. The number of spines and rays may vary one or two in different localities; thus, in the extreme South or Southwest the number of spines in the dorsal fin of the black bass may be often found to be 12 instead of 13, instead of 14, and so on. The spines are indicated by Roman numerals and the soft rays by Arabic numerals; thus, X, 12, means ten spines and twelve soft rays.

Species.	Dorsal.	Anal.
Black bass (<i>M. pollidus</i>).	X, 12.	III, 10.
Rock bass (<i>A. rupestris</i>).	XI, 11.	VI, 10.
War mouth (<i>C. gulosus</i>).	X, 10.	III, 9.
Calico bass (<i>P. nigromaculatus</i>).	VII, 15.	VI, 18.
Crappie (<i>P. annularis</i>).	VII, 15.	VI, 17.

"Bexar" seems to be in doubt as to the use of the name "goggle-eye." It is a poor name at best, and is applied to several different species. He states that "Hallock's Gazetteer" gives rock bass, croppie and goggle eye to the same fish, which is unfortunately the case on page 323; but this is an error. It is almost impossible to compile a work of the character and extent of this without some errors creeping in.

In the instance referred to it was no doubt, the intention of the compiler to include both the rock bass and the crappie among the "Fishes of the West," but somehow got them mixed. If "Bexar" will erase entirely the paragraph referred to, and write, in the margin, "rock bass, page 273; crappie, page 378," and then refer to the crappie on page 378 to the rock bass its present technical name *Ambloplites rupestris*, and the crappie will turn to page 378, and add the name *Pomoxys nigromaculatus* (L. S.) Girard (its present name) to the description of the crappie at the top of the page, he will have it correct—though this "crappie" is the calico bass. At the bottom of the page (378) the other crappie is described as "sand and tin mouth." On this same page he will also find the name "crappie" and will be able to under the name of "maw-mouth," or "rock bass."

While "Bexar" is about it, let him erase *Roccus chrysops* (on page 379), for it has nothing to do with "sun-fish;" but, turning to page 273, add it to the "white lake bass," for it is the present name of that fish.

J. A. HENSHELL.

THE BASSES OF TENNESSEE.—*Savannah, Tenn., Aug., 30th.*—I have just returned from a short fishing excursion to a stream some six miles away. Notwithstanding the low water and hot weather, we had fair sport, taking some game bass and perch, the largest, a bass, weighing three pounds. The mode of angling, most killing in the river, is with the minnow. The water and weather, is to fish on the bottom with live minnows. The season opens in the early morning and late, and resorting to the blue holes during the middle hours of the day. One can do no good in these streams by casting, either with minnow or fly. We have here three varieties of bass, *M. salmoides*, *M. pulchidus*, and a striped bass, yet our local anglers who distinguish fish by their color alone, make many more kinds. The two varieties of *M. salmoides* are called "black trout," "black trout," or "green trout," "pond trout," "white trout," "white trout." The "black or green trout" outnumber the other varieties, and is more highly esteemed. In addition to the other fishes named, we have here the rock bass, known in these waters as black perch. Both they and *M. salmoides*, show great diversity of color, some being very pale, others very dark, and you may take others of almost any inky blackness. The pickerel (*Esox americanus*) is common, were formerly abundant, but have recently become scarce, not a dozen having been taken this season. In

the "good old past" many large ones have been captured. The largest on record weighed seventeen pounds, and was ensnared by the president of the "Elaw Hammer Angling Association," the veteran angler of this portion of the State. The above mentioned "Klub" owes its name to the style of coat worn by its presiding officer on high day, and holidays. WILL.

THE REVISION OF THE SALMONIDÆ.

THIS work is progressing slowly but surely; it is so interesting, and has been so long needed, that we hail with joy everything concerning it from our ichthyologists. It has been such a relief to have the formidable list of thirty or forty species, recorded in the olden works, boiled down to about half a dozen. That the work is not yet complete is true, but the labors of Bean and Jordan show that they are not idle, and there is no doubt that the tangle into which Suckley got the Pacific coast salmon will eventually be straightened out. Suckley's work was perhaps as good as could be done with the material at his command, much of which was in such a state that it is a question whether it would have been a loss to science if it was entirely lost. He describes species from dried skins, and from specimens partly destroyed by alcohol, as well as made new species of male and female, old and young, as they differed in their characters. His limited number of specimens must, however, be his apology, as he did not have the advantages of the splendid collection of the National Museum at his command. On the subject of these Western salmon Prof. Jordan writes us as follows:—

BLOOMINGTON, Ind., Sept. 6th.

Editor Forest and Stream.

In reference to Dr. Bean's notes on the redfish in your paper of Sept. 2d, I have to say:—

1. I have now no doubt that the "Idaho redfish," the "redfish" par excellence, is *Oncorhynchus kenerlyi*. In my visit to Oregon and Washington I obtained considerable evidence which supports Dr. Bean's view of the case, which moreover is clinched by his positive examination of the specimens sent by Capt. Baird.

2. It is probable that the male of different species is also known as "redfish" in different localities, and of these "redfish," *O. nerka* is certainly sometimes one.

3. The determination of these species, made three years ago by Gill and Jordan, were based on very insufficient material; "the best we had," but still very poor. Since then, I have been able to examine them in their native waters, and my assistant, Mr. Charles H. Gilbert, is still after them. We have thus far failed to find any evidence of the existence of more than five species of salmon on our Western coast, although we are ready to enlarge our notions if any more actually turn up.

These are the following:—

1. *O. kenerlyi* (Suckley). The redfish known by its peculiar form, compressed and deep, the long compressed head, with the very large, oblique mouth. The vomerine teeth, as stated by Dr. Bean, are more than usually developed. Scales in a series alongside, 130-135. Branchiostegals, fourteen to fifteen. Anal rays (developed), fifteen. Back and tail, with black spots. Weight, usually less than five pounds. We know this to be Suckley's *Salmo kenerlyi*, hence its specific name is probably fixed.

2. *O. ginnat* (Richardson). The quinnat salmon, the largest and by far the most abundant and valuable species. Scales, 138-155. Branchiostegals, fifteen to nineteen, usually one more on one side than the other. Gill rakers about fourteen, below the angle about twenty-four in all. Pyloric ceca, about 160. Anal rays, about sixteen. Back and tail, with black spots. Weight, fifteen to seventy pounds. We know this to be the original *Salmo ginnat* of Richardson, and its specific name is not likely to be ever changed.

3. *O. tshawytsch* (Richardson). The "hooped" salmon. The smallest salmon yet known on our West coast. Scales, 137-139. Branchiostegals, thirteen to fourteen. Gill rakers, about thirteen below, twenty-three in all. Pyloric ceca, about sixty-three. Anal rays, thirteen. Back, spotted; tail always plain, except the uppermost ray which is sometimes spotted. This species reaches a length of about eighteen inches, and a weight of four to five pounds. It is probably, but not certainly, the *Salmo tshawytsch* of Richardson. There were no specimens of this species in the museum when our first studies of the *oncorhynchus* were made, and the name *tshawytsch* was adopted by Gill and Jordan for a different fish, which turns out to be the same as *Salmo Chalki*.

4. *O. nerka* (Walbaum). The blue back, or Fraser River salmon.

This species is found from Oregon to Alaska (fide specimen from Aleutian Island). It runs in small numbers in the Columbia with the quinnat salmon, and in much larger numbers further North. Scales, 130-135. Branchiostegals, thirteen to fifteen. Gill rakers, twenty-three below, thirty-five to forty in all. Pyloric ceca seventy-five to one hundred. Anal rays, fourteen. Weight, eight to ten pounds. A remarkably graceful species, the back deep blue, and with black spots anywhere. This is certainly the *Salmo nerka hyacodon* of Günther, and probably the *Salmo nerka* of Walbaum. Its name cannot however be considered as definitely fixed.

5. *O. gorbuscha* (Walbaum). The hump-back salmon. Scales, 215-240. Branchiostegals, twelve. Gill rakers, twenty-eight. Anal rays, fourteen. Weight, six to eight pounds. There is little doubt that this is the *gorbuscha* of Walbaum, and if so, its present name is permanent. DAVID S. JORDAN.

FISHING AT MARTHA'S VINEYARD.—*Collage City, Martha's Vineyard, Mass., Aug. 16th.*—Several of your subscribers have been sojourning here for a couple of weeks. Among the number are Mr. J. J. McGover, and Mr. M. W. Emmons Jr., of your city. Maj. Geo. Gifford, of Philadelphia, accompanied them on their fishing excursion during the week ending twenty-seven one day, and fish of Cape Cod were coining twenty-seven one day, and fish of four in other, and still another, and hooked forty-two, losing nine, and parting one line, and snapping another. Capt. Cleveland and his handsome craft have been chartered for two weeks. The Island of Martha's

Vineyard now teems with human beings, and all with one accord pronounce the Vineyard fishing equal, if not superior to any on the coast of Massachusetts. The 28th of August our city of cottages was illuminated, and \$300 worth of fireworks were exploded. G. G.

STRIPED BASS IN THE PISCATAQUA.—*Dover, N.H., Aug. 26th.*—Within a short time quite a number of striped bass have been caught at Piscataqua Bridge, a place on the Piscataqua River, some five miles from here, and eight from the sea. On Wednesday last, Mr. A. Clement succeeded in landing one that tipped the scales at forty-five pounds. He was brought to this city and placed on exhibition in one of our markets. Quite a little army of fishers are preparing to make a descent on the above named place, in hopes they may bring to the surface, if no further, some of these beauties of the deep. W. A. G.

HABITS OF SALMON—THE USE OF THE HOOK, ETC.

FOREST AND STREAM, NOVA SCOTIA, Aug. 30th.

FOREST AND STREAM, just received, contains a courteous note of inquiry from Mr. G. A. Gifford, respecting the use of the hook on the lower jaw of the male salmon, also notes by "Stanstead," in which the writer asserts that he has "taken considerable pains to get the opinions of many of the north shore fishermen regarding some of the theories advanced by him (Hind), that salmon are biennial spawners, and often enter rivers for sanitary purposes, not for the purpose of spawning." The replies "Stanstead" has forwarded me received were not favorable according to the fisherman's views.

In your issue of the 19th you reproduce Mr. Mowat's interesting letter, in which he takes exception to the view I have advanced regarding the scarcity of salmon this year. Finally, a St. John, N. B., paper of the 16th August, contains a rhapsody from the pen of "Salmo Winifred," according to local contemporaries, in which I am rather roughly handled for venturing to doubt the efficacy of the work of "Salmo Winifred," as now carried on.

If you can allow me space I would like to glance at all of these communications, beginning with the last first.

The author of *Salmo winifred* begins by calling names. This is unscientific and suspicious, but as it appears to be an acquired local habit I let it pass.

He then proceeds to refer to the "author" of the publication, this author says: "He (Hind) delivers himself of a stupid opinion respecting the reasons why the salmon are backward this year in their navigation inland," and in argument against my view the author of *Salmo winifred* urges the following luminous reason: "Everybody will agree that last winter was not a severe winter." In reply, I say that I did not consult everybody, or anybody about the winter. I referred to the comprehensive series of meteorological observations classified in the War Department of the United States, under the supervision of the late Gen. Meyer. I supplemented my inquiries with a review of the meteorological observations classified at Toronto, under Prof. Kingston, and recently under Supt. Carmichael. I did not encumber my letter to Prof. Baird with a reference to these authorities, because I knew that he perfectly understood where and how I had obtained my meteorological information.

And here, before referring to any other subject, let me linger for a moment to write a word in grateful respect to the memory of Gen. Meyer, as to one who has done much for humanity, and has left us in his prime. For four years, Gen. Meyer did me the honor to cause to be sent to me with unvarying regularity, the *Monthly Weather Review* from the office of the chief signal officer, and this without any charge whatever. I was indebted to Prof. Baird, in the first instance, for this courtesy, who suggested it, and while I have pleasure in acknowledging my indebtedness to the one, it is fitting that I should record a respectful appreciation of the life-work of the other. Gen. Meyer intimated and guided to marked success a scheme of coöperative observation, which will enroll his name among the benefactors of mankind.

I observe that Mr. Mowat states in the letter you have reprinted, "our weather here last fall was not colder than usual." In answer to these generalizations, I submit the following observations taken from the authorities already named.

MEAN TEMPERATURE LOWER IN 1879 THAN THE CORRESPONDING MONTH IN 1878.

	October.	November.	December.
Fredericton, N. B.	1.33	2.43	6.90
St. John, N. B.	2.51	3.58	5.40
Halifax, N. S.	3.15	2.30	5.93
Sydney, C. B.	5.10	5.20	6.33

MINIMUM TEMPERATURES.

	October.	November.	December.
Fredericton, N. B.	17.3	3.0	Below zero.
St. John, N. B.	25.0	8.0	16.0
Halifax, N. S.	23.4	15.7	9.4
Sydney, C. B.	27.1	19.6	9.0

From these observations it appears that, in all cases, the mean temperature from the October, November and December, 1879, fell very considerably below the mean temperature of the corresponding months in 1878.

In Gen. Meyer's comments on December, 1879, in relation to low temperature, he says: "The following notes are of interest, as indicating the excessive cold (sic) of the month in various sections," etc., etc.

So much, then, for the "stupid opinion" which I gleaned from the results of very many independent observers, and the author of *Salmo winifred* has courage to contradict by quoting "everybody."

Now, let me reply to "Stanstead," S. W., and Mr. Mowat, all in one, respecting the point that salmon enter rivers for sanitary purposes, and not necessarily arrive for spawning, and enter different rivers to those in which they were born. "Stanstead" wants proof; the other gentlemen don't believe.

Record of the experiences of the proprietors of the Erne River (Ireland), published in the official reports on the Irish Salmon Fisheries for 1875 and 1876. Oct. 19th, 1875: Male fish, caught in the Erne, weighing 10 lbs. Red, that is, in spawning condition, marked with medal No. 15. This fish was captured by angling in the Bandowes River on the 30th March, 1876, and weighed 12 lbs. Aug. 29th, 1876: Male fish, fresh, weighing 12 lbs.,

caught in the Erne, and marked with medal No. 20. Released, and subsequently found killed in the Lough-Lea River on the 28th November, 1876.

Here you have positive proof of identity, and of visiting a parent river to spawn, of leaving that river, and of being taken in a neighboring river some months afterward. What did these fish ascend the neighboring rivers for? It was not for spawning purposes—it was too early; and the rivers in which they were found were some miles distant from their native rivers. It was not for food, for the adult sea salmon does not feed in rivers.

Again, salmon are frequently reported by the watchful water-bailiffs in Ireland "about the mouths of rivers," waiting, it is supposed, for "a rise or fresher." They suddenly disappear, but not up the river; they go out to sea, or it may be to try other rivers. This is a constant observation.

SPRING SPAWNING SALMON.

Mr. Mowat incidentally acknowledges this habit, in describing the "spring kelts." I first saw the nests of spring spawning salmon on the 24th July, 1864, at the head waters of the western branch of the Southwest Miramichi. I was at the time making a geological survey of New Brunswick for the government. My canoe men were both excellent salmon poachers, and spoke of the spring nests as by no means uncommon. The nests are made in March or April, according to the season. I examined two of the nests I saw. The eggs were there, transparent, and consequently alive. If they had been of the fall schools, the eggs would not be there alive; these would have hatched in May, or, if they had died, then decomposed by July.

I wanted to get a salmon, and said to my canoe men: "Catch me a salmon." "To-night," was the reply. They constructed a negog, or Indian spear, making it out of a large nail, the tines of birch. An hour after nightfall I had two salmon and three grise, and could have obtained five times that number, if I had been so disposed.

The bright salmon caught in the Moisie River, on the spawning grounds in October, are spring spawners, coming up the river in the fall. Mr. Mowat's "spring kelts" coming from the sea late in November, with the ova at the same stage as the June fish, are spring spawners. I have mentioned spring spawners in Newfoundland waters, my article on "Spring Spawning," published in FOREST AND STREAM in January, 1880.

BIENNIAL SPAWNS.

This habit, to which some gentlemen take exception, is perfectly well known in Europe. The London market in January is supplied from the biennial spawners which congregate in the rivers in Ireland during the winter season, and which are known as fat winter salmon; also, from the fat tidal salmon caught, until 1878, on the 1st of January and subsequently, in the Sligo District, in Ireland, and to a less extent in the Dublin District.

The chief spawning season in the Sligo District is the last fortnight of December. The fish taken in the last week of the month, the close time vested at midnight on the 31st of December, were fat biennial spawners of the finest quality." This salmon was caught by hundreds the moment the church bells in Sligo District announced the opening of the new year, up to 1878. Then the proprietors of the upper portions of the rivers exerted themselves to have the close time extended to the 15th of January, and tidal salmon fishing begins there at midnight of the 15th.

In brief, the gentlemen who contend against the idea of biennial salmon spawners, should read, with care, Baird's article on the food of the salmon, translated by Dr. Theodore Gunther, and printed in Prof. Baird's Report for 1873 to 1875. They should read Dr. Frie's account of the Bohmian salmon. They should look beyond their own rivers, and see what the rest of the world has done and is doing.

THE HOOK ON THE LOWER JAW OF THE MALE SALMON.

It must not be supposed that the hook is a constant development on the full grown male. During his off seasons he does not develop a hook. During his spawning seasons his lower jaw alone protrudes and curves upwards. This is a very important fact in relation to the habits of the salmon and its instincts. It is very wonderful, and opens a new and I believe an untrodden field of inquiry in relation to the movements of many species of fish, particularly the anadromous species in connection with temperature and food supply. The principle it involves probably extends to various genera of the cold water fishes, and greatly affects their movements.

But, while during their barren seasons the old males are almost hookless, the young males, developing milt, always show the hook. I think that the old males congregate together in the sea during the barren years. That they visit the mouths and lower reaches of rivers in schools is certain (vide Baird). As a guide to the proper understanding of the use of the hook, we may glance at another of the salmonidae, the caplin. As June approaches, the male caplins develop ridges on the back of the male caplin, running from head to tail. The female has no such ridges developed during the spawning season. In July, when the caplin spawn, two males inclose a female between them, the developed ridges on their backs preventing the female from rising or slipping upwards. The trio then swim vigorously up a gently sloping beach, either tidal or submarine, to a depth of thirty fathoms, the condition being that the beach must be gently sloping. The pressure of the males, with the female between them, against the sandy beach compels the spawn from the female, the milt is discharged at the same moment, and the trio complete the process, apparently in a single rush, but of this I am not sure. The ridges are absorbed subsequently, and the backs of the males become nearly smooth, like those of the females.

It was the first hint of the use of the hook on the male salmon lower jaw from an Abenakis half-breed Indian, who was one of my canoe men when I was exploring the interior of the Labrador Peninsula in 1861. At the first falls of the Moisie River, where salmon in great numbers were crowded together, this half Indian, "Pierre," told me what he had seen when watching a Indian fashion, the salmon spawning. As this occurs only at night, and the evening is too early in the year to be out in the afternoon, it is rarely that the observer has the chance

to see the male salmon make his charge and grip. I saw it fairly on the only, but had no idea of its object until I saw the caplin spaw in Trinity Bay, Newfoundland, in 1876, and afterward found dead male caplin on the Northern Labrador, with the ridges nearly gone from their backs.

The explanation of the seizure of the female by the male dawned upon me when reading Barfurth's, Siebold's and Block's statements about the disappearance of the hook in the fat biennial spawning male, during his barren year.

Now as to structure. If Mr. Atkins will refer to the same volume of the Commissioner of Fisheries Report, which contains his own excellent paper on "The Atlantic Salmon," he will find, on page 719, a translation of a lecture on the organs of reproduction in fishes, etc.; and on page 721 he will see a diagrammatic illustration of the ovaries and oviduct of the majority of osseous fishes. I have searched in vain for anything like this structure in the anonymous salmon. I have utterly failed to discover even similarity in the anonymous salmon with the representation of the organs and their relation to the genital orifice. But I am not an anatomist, nor a physiologist, and should be sorry to find myself attempting to describe structural differences or affinities. This is the work of specialists nowadays. Were I to do so, I should probably discover *Salmo wilnotii*, No. 3, in five minutes. Hence my cautious statement, "I think you will find," etc., to which Mr. Atkins calls attention. But I long since found in the salmon (and have before me in alcohol at the present moment) a structure which led me to the conclusion that the eggs of the salmon were contained in closed sacs, separated from the oviduct by a membrane which serves the purpose of a hymen, and that it is the function of the hook on the lower jaw of the male fish to break this membrane when the proper hour arrives.

If Mr. Atkins will open a female salmon well advanced in spawn, *under water*, so as not to loosen the eggs from the oviduct, and have before me in alcohol at the present moment, I think, satisfy himself that the conclusion I have advanced is not hypothetical.

Your correspondents have touched upon one or two other points, which the space I have already occupied prevents me from noticing now. But with your permission I will advert to them in a future communication. Discussions on these subjects, if temperately conducted, must be productive of good, for while they lead to exposure and exposure is a different medium, they bring out important facts, as in Mr. Mowat's letter, which tend to the diffusion of knowledge and to public utility.

HENRY YOULE HIND.

A FISHING TRIP ON LAKE SUPERIOR.

DULUTH, Minn., Aug. 21st.

ABOUT three weeks ago a party of seven, including your correspondent, went down the north shore of Lake Superior, on a trout fishing trip. We had such good luck and such a pleasant time, that I thought your readers might like to hear of it.

The personnel of our party was, first and chiefly, the Piegian, then the Buffalo Bull, whom the Piegian was expected to drive, next, a nameless gentleman, then the "Freshman," and last, three boys. We left Duluth in the wee small hours of the 5th of last month and rowed down the lake six miles to a small stream, where one of the party caught a fair sized trout; here we found a gridiron, and as our party were eminently respectable so, to speak, we captured it. After rowing about three miles further, a tug took us in tow and landed us at Sucker River, eighteen miles from the lake. As we were to expose and expose in a different medium, we brought our blankets, we promised ourselves good sport on the morrow. Early the next morning, after a breakfast in which bread predominated, the whole party started off for the trout streams. We followed a deer trail for two weary hours, during which time all the party, with the exception of the Piegian and myself, turned back. We pushed on, and at noon were five miles from camp, with about fifty trout. At five miles from camp, we were asked to break, we walked a mile and a half further up the brook and then fished down. At 7:30 we came into camp with 160 good trout and true. The rest of the party had twelve fish. After a good night's rest we sailed on to Encampment Beach, thirty-five miles from Duluth, where we intended to spend the Sabbath. We selected as beautiful a spot as one often sees for our Sunday rest. Imagine a deep bay, with a sandy beach, perhaps thirty feet wide, running around it a distance of fully two miles, a rocky inlet rising perceptibly from the cold, sky-tinted water, as if in sharp contrast to the mainland, and crowned with foliage of the deepest green. Behind us rose "The hills, rock-ribbed and ancient as the sun," holding their store of precious metals for the use of man, while before us stretched out as far as the eye could reach the beautiful waters of grand old Lake Superior. As we stood there gazing over its boundless expanse, the sun sank behind the hills, and the glory of the sea and sky that I never expect to see surpassed.

Early Monday morning we started on, but the north-east wind blowing very hard we made but fifteen miles, and camped that night at Split-rock River. The next morning we put out early, bound for "Baptism or bust." At noon we rowed into B-aver Bay, a town of about one hundred people, and where we replenished our commissary department. The morning was running now. When there we met a party of three, fresh from Baptism, who informed us very coolly that they "didn't think we would catch many there, they'd just taken out a hundred pounds." This rather knocked our calculations in a heap, but we went on and reached our Mecca at 4 o'clock, in time for the evening fish. The "lone fisherman" went up the river about a mile, to the falls, and got only some dozen fish. He came back quite discouraged with the outlook. The next morning all the party but one went up the stream and brought down at noon about thirty fish, weighing on an average three-quarters of a pound each. They reported seeing a monster trout laying under a stone up the river, and so in the afternoon the boss fisherman and myself went after him. We saw him under the stone and grappled for him, hooked him, and pulled; he did not come, so I waded into the water for him and got him. He weighed about thirty pounds, and was very especially fat for the occasion, and slowly but surely pulled him up. As soon as he touched the ground the hook broke from his mouth and he and I fought for some moments, but the right won the day, and we put out on

string a speckled trout that beat anything I ever saw; he was *twenty-one and a half inches overall*, five inches deep two and a half inches in thickness and weighed when dressed four and a half pounds. Talk about your brook trout that weigh about a pound or two! You should have seen us after we had got him! My companion in arms made some remarks about the "Great horned spoon." I spoke of the "Devil trace river," and we made the woods resound. That was our gala day. Our bill of fare, too, on that day was style. Here it is: Breakfast: fried trout, flapjack, coffee and bread and butter. Dinner: flapjacks, coffee, fried trout, bean soup, crackers. Dinner: Supper: fried trout, baked trout, coffee, etc. That night we slept the sleep of the just, as it were.

About 4 o'clock the next morning one of the party went up the river and caught nothing except a duck. He found out, too, the reason for the name "Baptism"—he was thoroughly immersed. That morning we started for home, and of the trials and triumphs, the joys and sorrows of that homeward voyage I will speak in my next.

FRESHMAN.

BIG BASS.—Putnam, Aug. 29th.—Some eight miles from here lies the famous Webster Pond, which is very large, covering some 2,000 acres or more, and abounds in black bass, some very large, yet we do not know just how to catch them. Dobson and worms are principally used, but while we can see hundreds of great fellows swim past our hooks, they scarcely notice our bait. Once in a while one will notice, and perhaps bite, and while we catch only from five to twenty in a day's fishing, it seems, if we only knew the proper bait, we might catch hundreds where we catch but one now. Will some one let us know through the FOREST AND STREAM of the best bait, or indeed tell us how to catch some of these big fellows. There seems to be an abundance of food for fish in this pond, for shiners, perch and pickerel also abound. This lake, or pond, is of an average of say twelve feet deep.

G. F. W.

Answers to Correspondents.

No notice taken of Anonymous Communications.

N. A. E., Bangor, Maine.—The wild hogs of Florida are simply domestic hogs (*Sus scrofa*) run wild.

A. C. S., Savannah.—Can furnish any back numbers you wish. Much valuable information on yachting.

W. J. A., Denton, Texas.—In field trials, if a dog points a lark, turtle dove, or a rabbit, is it counted against him? Ans. No.

FOSIT, Boston, Mass.—Thanks for sending newspaper abstract of Prof. Farmer's lecture, but the author has promised us the full text of his article, which we shall publish shortly.

H. C. B., Warsaw, N. Y.—Write to A. E. Goddard, Guyard, Orange County, N. Y. He can put you in the way of getting the dog you want.

J. E. S., Attica, Ohio.—Door may be killed in the Upper Peninsula between Aug. 1st and Nov. 15th, and in the Lower Peninsula between Sept. 15th and Dec. 15th.

C. A. S., Milford, Mass.—Please inform me open season for game in Iowa—ducks, prairie chickens, etc. Ans. From Aug. 15th to Dec. 1st for pinnated grouse; Aug. 15th to May 1st for ducks.

G. W. R., Moodus, Conn.—What would be the fare from New York city to some good trout fishing in Pennsylvania, and what route is the cheapest? Ans. Trout fishing is closed for this year.

J. W., Iowa.—Does "The Birds of the Colorado Valley," by Dr. Elliot Coues, give a specific and generic description of all the birds treated upon, or is it in these respects the same as the "Birds of the Northwest," by the same author. Ans. "Birds of the Colorado Valley" does contain full descriptions of the birds treated differing in this respect from "Birds of the Northwest."

J. C. New York, N. Y.—Will you please inform me whether quail, rabbits and partridge may be shot in Connecticut after Oct. 1st? Also what may be shot. Ans. Quail, woodcock, ruffed grouse, rabbits, ducks and geese may be shot after Oct. 1st, except duck, geese and brant in the mouth of the Housatonic river.

MACF.—Pointer Mack, winner of prize at Centennial dog show, 1876, was by Dan out of Cate; Dan by Rap; Rap the son of old "hot, of Exhampton, and imported by Mr. Buell, his owner; Cate by imported Fanny. She was bred by Squire Chaloner, Warecheshire, England. Mack was owned by Mr. James Wurberton, Now Britain, Conn.

H. B. V., Bradford, Pa.—For internal canker the ear should be syringed with lukewarm water and thoroughly cleaned. Take Goulard's extract of lead one ounce, glycerine and carbolic acid one-quarter ounce, best olive oil four and a half ounces. Mix the two first-named, and add the oil gently, rubbing together in a mortar. The bottle must be well shaken before the infant is dropped in the ear. Feed lightly; give no meat; the food should consist of boiled green vegetables.

READER, New York.—I. We cannot distinguish between makers. Those advertised in our columns are all good. 2. Their guns are good. 3. Shot run. 4. Yes, all smooth bore can be so used, but we do not recommend it. 5. There are several good places. Cannape is highly recommended. Take H. R. R. to Kingston, thence Ulster and Delaware to E. to Shokan. C. Hookwell will give information and guide. 6. There is no dog that will hunt all the game you mention. A pointer or setter is best for birds, and a bound or common cur for the four-footed "varmints."

CHICAGO.—We would certainly not advise you to try the Perkins boiler. It is complicated and not any more economical than the common tubular boiler. Do not believe the statements put forth by interested bucksters in "rights" for America. Examine the trials in England and convince yourself. The boiler has now been in the market for ten years, and only half a dozen are in use, while many have been thrown out as worthless humbugs. With your soft coils the Perkins boiler would be an absolute nuisance and wasteful in fuel. See back files.

W. C., East Saginaw.—Taking boat at twenty-five feet water line, eight and a half feet beam, and four feet nine inches depth she will need two and a half to four tons ballast. Of this put say 1,575 pounds in the keel. Latter about fifteen inches below garboards amidships, eight inches on top and five inches on bottom, tapering at ends. Round up well forward and a little aft. The iron outside will be ten feet long and ten inches deep; average thickness, six inches. The keelson can be cast-iron if desired, and rest stowed between the frames under the floor or cast to it. See that it is secured and cannot shift. Cut away the keel for the outside iron, and bolt it through all. The midship section you send will make a very roomy craft. Girdsides of house a slight "tumble home." Mast for compromise cutter about nine feet six inches from forward end of water line. Forestay set up at stem head; jibstay through bowsprit end and down to outwater. Use fixed bowsprit and stand-lift jib. Hoist of main sail, twenty feet boom twenty-seven and a half feet, gaff fifteen feet, bowsprit outward twelve feet. Peak gaff with jibstay, or nearly so. Topmast fourteen feet above cap, fitted to house. Exact sail plan depends upon immersed fore and aft section. Center of sails about six inches forward of center of lateral resistance. Several such boats in our waters, giving much more satisfaction than the pancake variety.

T. E. K., Bradford, Pa.—I have a Sussex cocker puppy three or four months old. About two weeks ago he showed signs of being out of order. His hair appeared to be dead and dry; sores showed themselves on different parts of his body and his eyes ran badly. I gave him two drops of Fowler's solution daily, and also gave him an occasional dose of sulphur in his milk. Do not think it came from overfeeding or high living. He did not seem to improve under this treatment, and last Sunday he showed indications of what I supposed was distemper, though I never saw a case and have had no experience with the disease. He had spasms, during which he threw a frothy sline from his mouth. I have been giving a mixture of cream of tartar, sulphur and gunpowder, one teaspoonful once or twice a day and two drops tincture of nuxvomica. On Friday, his symptoms were more alarming. He would run around in his room and bite things that came in his way, and I feared he might have signs of being rabid and intended having him killed; but this morning he does not show these wild signs and recognizes his friends. He eats heartily. We feed him on boiled milk and bread, with some cooked meat. He has an almost constant twitching of the muscles, but I do not think his eyes are running so much now. Ans. The dog requires to be very closely watched. The symptoms given point very strongly to rabies, although it is not certain that the disease appears in one so young, unless bitten by a rabid animal. Write again.

PUBLISHERS' DEPARTMENT.

A REMARKABLE CIRCUMSTANCE.—Mr. W. E. Sanford, of Holley, N. Y., became afflicted a few years since with a most terrible inflammation in the lower portion of his body. He did all that thought could suggest to remove it, even submitting to a most painful surgical operation. At last, when death was longed for and seemed near, he began (against the wishes of his friends) taking Warner's Safe Kidney and Liver Cure, and is to-day a strong man and in perfect health. Any readers who may question this remarkable assertion can address him at Holley, N. Y., and ascertain for themselves.

CATALOGUE OF HAMMERLESS GUNS.—Messrs. J. Palmer O'Neil & Co. have recently forwarded to us a copy of their new catalogue of Hammerless Guns, a publication which is devoted to showing the character of the sportsman's goods now for sale by them. It is profusely illustrated with line woodcuts, and seems to mention every article that the shooting man can require. In addition to the pages devoted purely to business are several which include in their contents the game laws of Pennsylvania, abstracts of those of most of the States and Territories, and a number of useful hints to sportsmen.

THE WILSON ADJUSTABLE CHAIR.—The attention of every one of our readers, be he bachelor or family man, is particularly directed to the advertisement on another page of this paper of the Wilson Adjustable Chair. This is an article of real merit. Through its wonderful adaptability it really takes the place of from \$30 to \$100 worth of inlaid beds, chairs and lounges. It is a clever addition to the parlor or library. There are chairs and chairs, but this is the chair. Many easy-chair-makers have done excellently, but the Wilson has excelled them all.

—The Holabird Shooting and Fishing Suits, Uppertroves & McClellan & Co. manufacturers, Valparaiso, Ind. Send for circular. "The 'Holabird Shooting Coat' the best in the world."

—Try Diving Decoys and Improved Explosive Target Balls See advertisement.

—Our readers will do well to notice the new advertisement of E. Remington & Sons.

—The American Arms Company, as explained by their new advertisement, will reduce the prices on their guns for a short time. Send in your order if you want to get a good Fox gun cheap.

AMERICAN CHAMPIONSHIP RECORDS.

Recorded championship games, to Aug. 31, 1880, are: 100 yards, 10 w., C. C. Wilmer, Short Hills A. C., Oct. 12th, '78; and R. La Montagne, New York A. C., Sept. 25th, '78; 230 yards run, 22½ sec., L. E. Myers, Manhattan A. C., Sept. 20th, '79; 410 yards 49½ sec., L. E. Myers, Manhattan A. C., Sept. 20th, '79; half mile run, 1 min. 59½ sec., L. E. Myers, Manhattan A. C., July 17th, '80; one mile run, 4 min. 29½ sec., L. E. Myers, Manhattan A. C., May 31st, '80; five mile run, 27 min. 53½ sec., W. H. Robertson, Brooklyn A. C., June 5th, '80; 120 yards hurdle race, 17½ sec., H. Edwards Finken, New York A. C., Oct. 12th, '75; one mile walk, 8 min. 32½ sec., E. E. Merrill, Union A. C., July 5th, '80; three mile walk, 21 min. 42 sec., T. H. Armstrong, Jr., Harlem A. C., Sept. 14th, '78; seven mile walk, 53 min. 36½ sec., W. H. Purdy, Greenvale A. C., Sept. 20th, '79; running high jump, 5 ft. 8½ ins., J. P. Conover, Col. Coll. A. A., May 9th, '79; running broad jump, 21 ft. 8 ins., J. S. Voorhees, Brooklyn A. C., June 5th, '80; pole vaulting, 10 ft. 7½ ins., B. F. Richardson, Scottish American A. C., July 17th, '80; putting the shot, 35 ft. 2½ ins., J. A. Bullerton, Montreal Lacrosse Club June 9th, '80; throwing the hammer, 50 ft. 1 in., F. Larkin, Princeton Coll. A. A., May 9th, '79; throwing 50 lb. shot, 22 ft. 1½ ins., Wm. H. Curtis, New York A. C., Sept. 20th, '79; bicycle race, 2 miles, 6 min. 27 sec., W. B. Clark, N. Y. Bicycle Club, Feb. 14th, '80.

FIXTURES.

Peconic Bay, L. I., Nov. 29. Jacob Pentz, Secretary, New York.

23 to 36 inclusive, silver cup, presented by Mr. Henry Hogbe
Mrs. A. D. Stewart's colley Heather.

No. 5.—For best collie, dog or bitch, silver medal, presented by Sheriff Jarvis, R. E. Brown's dog.
No. 6.—For best fox terrier, dog or bitch, silver cup, presented by Mark W. Irish, Esq. R. G. Brown's dog.
No. 7.—For best pointer, dog or bitch, \$10, presented by C. A. Brough, Esq. E. Tinsley's puppy.

THE ST. LOUIS DOG SHOW.—Persons intending to exhibit at the coming dog show at St. Louis are reminded that the date at which the entries close is Monday next, 20th inst. There is every prospect that the show will be very successful, the entries being already large. The express companies have promised, on prepayment of the usual rates, to return all dogs free of charge.

NEBRASKA FIELD TRIALS.—Lincoln, Neb., Sept. 16th.—*Editor Forest and Stream.*—The date of closing entries is Sept. 25th, instead of Aug. 31st, as printed in official programme by mistake. We are receiving entries from New York, Pennsylvania and the Eastern States, and the prospects are most encouraging for splendid trials.
J. H. HARLEY, Recording Secretary.

DOG FLIES.—Utica, N. Y., Sept. 14th.—*Editor Forest and Stream.*—I notice many articles in your paper about "dog flies," how to prevent them, etc. I will give your readers my experience. Last November, my dog Duke was covered with them, in spite of flea powder. I gave him a bath of yellow cedar leaves under the carpet in his kennel. In a week's time there was not a flea left on him, and has not been from that time to date. He would catch one or two occasionally from other dogs, but they would disappear in twenty-four hours of their own accord. Probably red cedar, or Spanish cedar, or sandal wood would answer the same purpose, but I have not tried either, as yellow cedar is more convenient and answers sufficiently. By publishing this you will doubtless confer favor on many dogs.
J. D. C.

SMALL POINTER STOCK.—It has been our intention, ever since the New York Dog Show, to call the attention of our readers, and particularly those interested in the small pointer breed, to the wonderfully beautiful and healthy stock owned by Mr. Van Wagenen, of this city. There is nothing superior in this country to the get of champion Dutchess, by Mr. Edmund Orgill's champion Rush. Dutchess is too well known and has been exhibited too often to need any extended eulogy in these columns, and the same may be said of Rush. She is a bitch, with an exceedingly handsome head and of beautiful proportion combined with great power of body; and in the field exhibits a go-ahead-iveness that could hardly be expected to be seen in a dog so finely bred. She is as plucky as she can be, and no bunch of green briars is she afraid to face. Full of energy and life, as anyone knows who has seen her on the bench, seldom lying down, and always ready for a romp. The secret of this is, that when at home on the farm of her master, at Pomona, Rockland County, N. Y., she is allowed absolute liberty to roam over the grounds where she will. Her puppies are never sick and are ever free from mange, the bane of so many kennel establishments. Plain, wholesome food, clear pure water and a bed that is constantly being changed, have produced this result. Mr. Orgill's Rush is acknowledged by winners to be one of the most representative small pointers in the country, and a rare stud animal.

F. S. P., of Pottsville, N. Y., has an intelligent poodle which he has taught to scratch while standing up. The dog performs the act at word of command, and the proud and happy owner exhibits him with proudest pride.

KENNEL NOTES.

SALES.—*Maud S.*—Messrs. Hollis and Fellows, Hornell Cocker Kennel Club, Hornellsville, N. Y., sold, Sept. 16th, the black cocker bitch puppy Maud S., whelped Aug. 1st, 1880, to Mr. Robert Walker, Franklin, Delaware County, N. Y. *Dash*—Mr. W. F. Steel has sold his Irish setter dog Dash to Mr. Geo. W. Folson, of this city. *Battercup*—Wildair, whelp—Messrs. Hollis and Fellows have sold to party unknown black cocker bitch puppy Battercup—Wildair, whelped May 20th, 1880.

BRED.—*Dull-Prince of Orange*—Mr. John Davidson's (Monroe, Mich.) imported Llewellyn bitch Dull to his imported Laverack Prince of Orange, yellow prize winner at Alexandra Palace show, Sept. 1st. *Dull-Prince of Orange*—Mr. Jordan's English setter bitch Lulu (Baiton-Pora) to his Bonedick (Dash III. Opal).

WHELPS.—*Bosha*—Mr. E. A. Herzberg's English setter bitch Bosha, whelped Sept. 11th, four bitches and two dog pups, by his pure Laverack Aldershot—none for sale. *Bell*—Mr. L. W. Gunn's (Greenfield, Mass.) Irish setter bitch Bell, thirteen months old, whelped fifteen puppies on Sept. 7th, seven dogs and eight bitches, by owner's Jack.

The Rifle.

—Address all communications to "Forest and Stream Publishing Company, New York."

RANGE AND GALLERY.

OTTAWA, Canada, Sept. 11th.—The Canadian Wimbledon for 1880 has had a most successful week of it for the past six days. What Creemore and Wimbledon are to larger woods, Ottawa has become to the land of the brave. Founded in 1885, and holding its early meetings, before the birth of the capital, elsewhere, the association has now finally and firmly planted itself by the banks of the Rideau and close to the arms of its nursing mother—the government. In accordance with the time-honored custom of civilized and barbaric nations alike, the opening day was rendered duly formal, and at the same time cheery, by a well-served luncheon, given under the appropriate covering of a big matinee, whereat all the notables in town and the leading visitors were present. Col. Gzowski, the President, being the host. Here, in a very elastic dinner hour, the usual complimentary and congratulatory speeches were made by Mr. Maj. Gen. Luard, the new commanding officer of the Canadian militia, was for the first time heard by a Canadian audience.

The range itself presents a very picturesque appearance. Perched on a high slope, which overlooks a valley some 600 yards broad, are clusters of white tents gleaming under a hot September sun—tents of the various officers of the association, tents of

refreshments, living tents of visitors duly labelled; here Nova Scotia, there Ontario, New Brunswick, Quebec and even Manitoba. British Columbia has not yet in an appearance, the 2,000 miles of the "iron road" acting presumably as a deterrent. Then there is a charming nest of tents, big and little, devoted to the use of Col. and Mrs. Gzowski, tastefully fitted up with flower beds in front and guarded by a fence of ropes and pickets. Here plays the band and Mrs. Gzowski receives visitors, though unfortunately the world which visits is still at the seaside and lakeside winding up its summer season.

The programme of the meeting has been a very heavy one, and the Snider-Enfield rifle has been tested to its best. Among the prizes of special interest are those presented by His Excellency the Governor General and Her Royal Highness the Princess Louise, to be competed for with Snider-Enfield rifles, at 200, 500 and 600 yards—10 rounds at each range—by the fifty competitors making the highest aggregate scores in the preceding matches, provided they are members of the active militia forces of Canada, members of the staff, or officers who have retired retaining their rank. First prize, a special badge and \$250; second prize, a badge and \$100; third prize, a badge and \$100.

On the first day the range was not largely attended, first days being probably suggestive of immaturity of arrangement, and consequently those present were chiefly men particularly interested in the contest, watching through glasses the twenty targets which constantly rose and fell behind the markers' lines, or eagerly discussing some ingenious dodge for sighting or getting at the windage. There was nothing, however, of the rehearsal character in the proceedings. The association has secured as its executive officer this year Capt. Costin, a man of great experience in all matters of the range and rifle, an experience gained by a long course at Wimbledon, and all ran smoothly. The system seemed to be admirable, and the precautions taken will effectively guard against any repetition here of those ugly instances of false marking which proved so startling this year at the English meeting.

A center of envy to some was Lieut. Col. Gibson, whose 5 decorations showed him to have been present at Wimbledon 3 times, and to have been the happy winner of the Prince of Wales prize last year, a prize which carried with it £100. He also won the Kolapore Cup badge when the Canadian team shot against the English for that trophy. His, though, was only the badge of '79, whereas he had been present that of '75, on which appeared the magic letters "Wou." Indeed there were several who wore evidences of honors gained on both sides of the Atlantic, the heroes of the day.

Without going into details of the matches, the meeting may be summed up by saying: The gathering will not be remembered for good shooting, although that considerably improved latterly, but it will be remembered because of the generally satisfactory nature of the arrangements made, and the good feeling which prevailed throughout. No complaints have been made, and all the competitors appeared to be satisfied that the fairest justice has been done them. The weather has been favorable in most respects, but the wind at times proved very trying on account of its varying character, especially in the early part of the week.

The conclusion of the military matches enabled the statistical officer, Col. Bacon, to make up the squad from which the Wimbledon team of 1881 will be chosen. They are as follows:—

1. Sergt. T. Mitchell, Tenth Royals.....	402
2. Major Macpherson, G. G. F. G.....	386
3. Private J. N. Mitchell, Tenth Royals.....	385
4. Capt. Thomas, Tenth Royals.....	379
5. Capt. Balfour, Eighth Royals.....	379
6. Lieut. Swan, Thirty-sixth.....	379
7. Sergt. M. Mitchell, Thirtieth.....	379
8. Lieut. W. Mitchell, Thirty-second.....	379
9. Private A. Wilson, Thirty-third.....	375
10. Staff-Sergt. Walker, G. R. F. G.....	375
11. Private Anderson, G. G. F. G.....	373
12. Lieut. Crowe, W. B.....	373
13. Sergt. Weymann, Eighth Cavalry.....	371
14. Capt. Weston, Sixty-sixth.....	369
15. Color-Sergt. Hancock, Thirtieth.....	368
16. Lieut. J. Nicholson, Tenth Royals.....	367
17. Sergt. Sutherland, G. G. F. G.....	366
18. Private Walters, Walsford Infantry Company.....	363
19. Staff-Sergt. Smith, Tenth Royals.....	362
20. Sergt. Paine, Thirtieth.....	361
21. Quartermaster Corbin, Sixty-third.....	361
22. Private Brown, Tenth Royals.....	359
23. Sergt. J. Moss, Fiftyth.....	359
24. Wheeler, G. W. F. B.....	359
25. Private M. Mitchell, Thirtieth.....	356
26. Corp. Brady, Queen's Own.....	356
27. Private O'Grady, G. G. F. G.....	356
28. Lieut. Hunter, Tenth Royals.....	354
29. Private C. Bent, Cumberland Provisionals.....	354
30. Sergt. Richard, Seventeenth.....	353

BOSTON, Mass., Sept. 11th.—The meet of the Massachusetts Rifle Association at Walnut Hill to-day was very fully attended, and excellent records were made. Capt. W. H. Jackson, of the American rifle team, was on the ground during the afternoon, being his first appearance since his return from Europe. Subjoined are the best scores:—

CREEDMOOR MATCH.										
E. F. Richardson.....	5	4	4	5	5	5	4	5	5	4-47
O. M. Jewell.....	5	5	4	5	5	4	5	5	4	4-45
C. H. Estabrook.....	5	5	4	5	4	5	4	5	4	4-45
J. Nichols.....	5	5	5	4	4	5	4	5	4	4-45
E. B. Southard.....	5	5	4	4	4	4	5	4	5	4-44
J. James.....	5	5	4	4	4	4	4	4	4	4-44
G. Warren.....	5	5	4	4	4	4	4	4	4	4-44
J. B. Fellows.....	4	4	4	4	4	4	4	4	4	4-42
J. Jordan.....	4	4	4	4	4	4	4	4	4	4-42

MASSACHUSETTS MATCH.										
O. M. Jewell.....	10	12	11	11	10	11	10	11	10	12-106
E. F. Richardson.....	10	12	11	11	10	9	11	12	9	106
R. Davis.....	10	11	11	12	12	11	8	11	10	106
A. B. Archer.....	12	10	8	11	10	9	10	11	10	102
E. B. Southard.....	10	8	8	8	8	8	8	8	8	80
G. Warren.....	10	8	8	6	5	8	6	10	6	85-75

BALTIMORE, Md., Sept. 4th.—The best scores in the 200 yards weekly match at Patapsco Range, to-day, were:—

L. Dieterich.....	4	4	5	5	4	4	5	4	4-43
A. Roder.....	5	5	4	4	3	5	4	4	4-43
F. A. Dressel.....	5	5	4	4	4	4	4	4	4-43
W. T. Redwood.....	4	5	4	3	5	4	4	5	4-42

For the medals the scores stood: A. Roder 45, A. F. Dressel 42, L. Dieterich 40.

On 600 yards only 2 completed their score, 25 shots: H. B. Coulson 124, A. V. Canfield, Jr. 120.

DR. RUTH'S OFFICE.—For use in his tour of exhibition through the Eastern States Dr. Ruth has purchased a complete shooting outfit from the Winchester Repeating Arms Company.

ADVERTISEMENTS.—Advertisers are respectfully requested, in all cases where it is possible, to send in their advertisements by Saturday of each week before the issue in which they wish them to appear.

Cricket.

—Address all communications to "Forest and Stream Publishing Company, New York."

FIXTURES.

Sept. 18th.—At Nicetown, Germantown vs. Merion (ret-rans).
Sept. 17th.—At West Philadelphia, Belmont vs. Stetten (Am-C).
Sept. 17th.—At Prospect Park, Manhattan (25 vs. Young Am-C) (C-B).
Sept. 18th.—At Nicetown, Girard vs. Germantown.
Sept. 18th.—At Hoboken, St. George vs. Staten Island.
Sept. 18th.—At Harrowgate, Girard (24 vs. Colbairth).
Sept. 18th.—At Ardmore, Merion (24 vs. Girard).
Sept. 22d.—At Prospect Park, Scotch vs. English.
Sept. 22d and 23d.—At Stenton, Eleven English vs. Eleven Am-C.
Sept. 24th and 25th.—At Nicetown, University of Pennsylvania vs. Harford.
Sept. 25th.—At Harrowgate, Girard vs. Belmont.
Sept. 25th.—At Ardmore, Merion (24 vs. Girard (25)).
Sept. 25th.—At West Philadelphia, Germantown (24 vs. Belmont (24)).
Sept. 27th.—At Ardmore, Staten Island vs. Merion.
Sept. 28th.—At Stenton, Young America vs. Oxford 15.
Sept. 29th.—At Harrowgate, Merion vs. Girard.
Sept. 29th.—At Nicetown, Germantown vs. Staten Island.

ORIGIN OF ROUND-ARM BOWLING.

BROOKLYN, N. Y., Aug. 25th.

Editor Forest and Stream.—

Not long since I noticed in an article on cricket, published in the New York World, a reference to the origin of round-arm bowling which was inaccurate. Having been born and bred in the county of England (Kent) where the new style of bowling was first introduced, and also personally acquainted with the originator of it, I thought, perhaps, it might be interesting to your readers to have the few and simple facts of the matter from me (perhaps the only one now living) who was, as it were, an eye-witness of the birth of round-arm bowling, and intimately acquainted with cricket and the cricketers of Kent of that period.

Mr. John Wills, familiarly known by his neighbors as Squire Wills, was born near Canterbury, possibly as early as 1755, certainly not later than 1760, and, therefore, was about thirty or thirty-five years of age when he originated round-arm bowling at his residence at Sutton, about two miles from Maidstone, Kent. He was then in his prime as a cricketer, playing for his county against all England and other counties, as well as in all the local matches. He was, of course, an enthusiastic cricketer, always ready for a game, and upon one occasion, wanting some practice and having no one to bowl to him he got his sister (not his daughter, as some accounts say, for he never was married) to throw to him, and every cricketer, if he ever saw a female throw a ball, must have noticed that the motion is very similar to the round-arm delivery. No doubt Miss Wills threw some well pitched and good length balls, which the records of the Marylebone Club show that Mr. Wills attempted to introduce his new style in a match, Kent vs. All-England, on Lords in 1822, but his effort was met with bows of derision and the new style was interdicted by the M. C. C., upon which he left the field and did not play in the match, his place being filled by consent. Although I did not witness this match I perfectly well remember the excitement created among cricketers. From what I have said it will be seen that Lillywhite's story was wrong, as published in his "Cricketer's Companion" for 1871. With all play whenever the former term tied, but not when the snow was on the ground, and it could not have been his daughter, because he never was married, and the motion did not originate from the girl's effort to keep her hand away from her skirts, as Wills would not have been satisfied with a young girl's "toss." He wanted force which could only be had out of a throw. Lillywhite did not take up round-arm bowling until after the refusal of the All-England eleven at Lords to allow Wills to bowl in the new style, and when he heard of the circumstances, and doubt considerable romance had become attached to the story (viz. the three black crows).

Wills never played in a first-class match after his own club's knowledge, contenting himself with playing for his own club. Wills did not live in the parish, against other local clubs. At one time Marden felt strong enough with Wills and Girard to challenge the County of Sussex, but I do not think the match ever came off. Notwithstanding the effort of those in authority to prevent round-arm bowling, it was taken up by bowlers, and it soon worked its way into general play. I remember one of our Gillingham bowlers, Tom White, adopted it immediately; in fact, he was the first I ever saw who bowled with round arm in a match. Wills was a thorough English squire of the period. He possessed £100,000 on coming of age, but being of a generous disposition, lending when asked to, but never asking for his own again, and always living in an expensive way, his fortune in time slipped through his fingers. He was a thorough sportsman, and kept a fine pack of hounds, which he bred himself, crossing the fox-hound with the black and tan terrier and then crossing back again with the foxhound. This he did because the full blooded fox-hound was too large and not as well adapted as the smaller breed he produced were to a country so well wooded and with such steep hills as that part of Kent. The time came when his resources were impaired, that he had to give up his pack, and hunted that of someone else. Still later finding that he could no longer live on an equality with those he had for so many years associated with, he left his native county in about 1840, settled in Gloucestershire and ended his days there.

Among other old-time cricketers I recollect Mr. Budd, very well known, residing in knee-breeches and silk stockings, and Lord Frederic Beauclerk, a Norfolk (Tom Norridge we used to call him) Ashley, a carpenter, who, when his employer left Chatham for London, followed him, and when his employer left Surrey, played for Surrey. Then there was Jimmy Jowson, a shipwright, employed in Chatham Dockyard, who I recollect seeing play single wicket match at Sutton, his opponents being his father, son, and George Wilson his son-in-law, who did not succeed in getting him out, although they were all three good cricketers. Later, the Myrns (there were four brothers), Alfred the youngest and most famous cricketer. Walter used always to long-stop Alfred's fast bowling, and when he was on his legs, he considered as good a cricketer as any in England. But I remember while the match, Leeds Park vs. M. C. C., was being played at Leeds Park, I was staying at my friend John Roper's house, at Hollingbourne, where Wrenham, Hillyer and others were also staying for the day's play, and they said, "They did not care to play with Adams on the same eleven, as he was of no use, if the match was 'up hill,' if bowling, he could not stand being

These are represented in the last three cuts. The *readiness* with which they can be attached as required is one feature. The *cleans* sets up with a nut below, and cannot pull out of the way. It is often the case in the very early style of mills. The *leader* for ball-balls, this later, etc. The *ball* ball ball, etc. The *wear* and *friction* are materially reduced the *greater* *cutting*

The above prices are for guns at the Works. The extra cost for delivery in New York will be: On guns costing at Works less than \$100, \$8.50; those costing \$100 and upwards, \$11.50. The gun at \$150 is fully equal to the finest guns imported

A BEAST OF A SALMON.—Mr Buckland tells the following story: "A very nervous man went out fishing on Loch Tay. An immense salmon took the fly and ran the reel out in the most violent manner, the rod shaking and bending with the weight of the fish. The angler—we cannot call him sportsman—turned pale with fright. At last, as the line had not been fastened to the spindle of the reel, of course the fish ran it all out and escaped. With that the angler exclaimed: 'Thank heaven! the brute's gone; let's go ashore.'"

"In Tuckerton Bay, and generally in the thoroughfares along the New Jersey coast, the genuine man-eating shark makes its appearance about the 1st of August. It attains a length in these waters of sixteen feet—at least an old fisherman informs us that he has seen them there of that length—and they would not hesitate to seize and carry off any bather within reach. Lately Mr. David Shuter, of this city, and some friends captured near Atlantic City a shark weighing 350 pounds and measuring nine feet in length. It was taken in Grassy Bay, and required the united strength of seven men to land."

If we had some evidence that these were "man-eaters," such items as this, going the rounds, might be useful in some other way than simply giving evidence of the popular misconception on this subject.

Miscellaneous Advertisements.

Experienced Sportsmen

Buy their Shooting Suits of G. W. Simmons & Son, (Oak Hall, Boston), who are the makers of the Prize medal "Boston Shooting Suit," which is the very best that is made; never tears, or rips—has its seams sewed with silk and linen—and its buttons so securely fastened they never come off. If any one wants the proper outfit let him send to **G. W. Simmons & Son, OAK HALL, 32 to 44 North Street, Boston.**

TRY THEM.

Divine decoys and new improved explosive target balls. Samples of either sent postpaid for a dollar. Circulars free. **DIVING DECOY CO., Rochester, N. Y.**

50 All Gold, DeCOY & Lit's Cards, (No. 2 Aiken) Name On, Inc. Clinton Bros., Clintonville, Conn.

For Sale.

ATTENTION DUCKERS!

FOR SALE—THAT LARGE FRAME HOTEL, formerly kept by STONE & BALANCE, with about twenty rooms and store attached; neatly furnished within a few hundred yards of Van Hook's Landing, Currituck county, N. C., which is but half a day's trip by steamer from Norfolk, and in close proximity to the famous ducking marshes of that section, so well known to all the sporting clubs of the north. This property cost about thirty-five hundred dollars, (\$3,500) but will be sold very low. Apply to

M. L. T. DAVIS & CO.,

Sept 10-4t. Agents for creditors of W. C. Stone, Norfolk, Va.

FOR SALE,

An Earthly Paradise.

PLEASURE, HEALTH, HAPPINESS. Address BOX 97, CAMBRIDGE, Md. may13-90

WILD RICE SEED for sale. \$3 per R. VALENTINE, Janesville, Wis.

CHAS. H. VAN VECHTEN.

FERRETS FOR SALE.

\$7 PER PAIR.

\$1 FOR SINGLE FEMALE.

\$3 FOR SINGLE MALE.

Sept 2-1f **CHARLES H. VAN VECHTEN,** Victor, Ontario County, N. Y.

FOR SALE CHEAP—Sixteen feet sharpie; new and complete; well adapted for Florida waters. Call or address CHAS. COUNTRY, 50 East 11th street, Harlem, N. Y. Sept 14-1t



ABBEY & IMBRIE,

Highest Quality Flies.

Small to medium Trout, reversed wings	\$1 50 Per Doz.
Large Maine	2 00 " "
Small Black Bass,	2 00 " "
Large	3 00 " "
" " trolling on double gut	4 00 " "

Any of the above flies tied with jungle cock shoulders and golden pheasant crest tails at 50cts. per dozen extra.

Salmon flies according to pattern, - - \$3 00 to \$6 00 Per doz.

The celebrated "Corduroy" (silver or gold) trout and bass flies, \$3 00 per dozen.

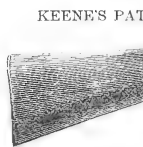
We have over three hundred patterns in stock, and can tie any pattern to order. Prices are given per dozen; we do not sell less than one dozen, but will give any assortment in the dozen. All our flies are tied on our celebrated Spring Steel Sproat Hooks.

ABBEY & IMBRIE,

48 Maiden Lane, New York.

REMINGTON'S MILITARY, SPORTING AND HUNTING REPEATING RIFLES.

KEENE'S PATENT.



P. O. BOX 3,994.

Simplest, Most Efficient, Indestructible. Adopted by the U. S. Government in the Navy and Frontier Service. 10 Shots, .42 Cal. 70 Grain Standard Government Cartridges. Prices: Carabines, \$25 Frontier Rifles, \$22; Sporting and Hunting Rifles, \$25. Discount to the Trade Only. Send for Catalogue and Price-Lists. **E. REMINGTON & SONS, 283 Broadway, N. Y.**

THE BALLARD RIFLE STILL VICTORIOUS.

SEE J. S. SUMNER'S FULL SCORE AT WALNUT HILL, 50 IN A POSSIBLE 50! FEB. 23, 1880

Fifteen Bulls-eyes in Succession!

SAME MATCH, 200 YARDS OFF-HAND, MADE WITH BALLARD RIFLE, NO. 612.

The Ballard is the only Rifle that has made a Full Score at Creedmoor.

The Ballard is the only American Rifle that has won the Prince Albert Prize at Wimbledon.

THE BALLARD ALWAYS FITS THE SHOOTER

The Empire Rifle Club, in their trips to Boston, ALL used Ballards.

"A WORD TO THE WISE," ETC.

ALL DEALERS HAVE THEM. FOR CATALOGUE AND PRICE LISTS APPLY TO

SCHOVERLING, DALY & CALES,

Sole Agents in New York for Card's Revolving Ball Trap.

84 Chambers street, NEW YORK CITY.

For Sale.

Auction Sale

OF

FINE BREECH-LOADING GUNS.

BARKER & CO.,

AUCTIONEERS,

47 and 49 Liberty Street,

Will Sell by Auction on Tuesday, September

21st, at 12 O'Clock M.,

AN IMPORTER'S STOCK of English Breech-Loaders of the following celebrated makers: W. & C. Scott & Son, Williams & Powell, W. W. Greener, J. P. Clabrough & Bros., V. C. Schilling, Wm. Moore & Co., Houehill and others. All of which are fully guaranteed by the consigner and by us. The guns will be on exhibition at our store, 47 and 49 Liberty Street, on Saturday the 19th inst., and until hour of sale.

FOR SALE—Fine, double-barrelled, breech-loading fowling-piece; central fire, top lever action, rebounding locks and all latest improvements. Fitted up in case, complete, with cleaning apparatus, etc. This weapon is light, elegant and suitable for young gentlemen, or any person having good shooting. It is of best English make, quite new, sure killer and guaranteed. Address L. T. office. Sept 14-1t

GUN FOR SALE.—A NEW W. W. GREENER, triple wedge tail, top snap, extension rib, pistol grip, 12 gauge, 25in. cylinder bore, 7 lbs. 2 1/2 lb. drop; 14 stock; patent fore-stock—a beautifully finished and excellent shooting gun, at a sacrifice, and for no fault. Address M. P. McKOON, Franklin, N. Y.

FOR SALE.—A 10-gauge, 32-inch barrel, 8 1/2 lbs., best quality, Rigby breech-loader, or would exchange for a 12 or 14-gauge gun, of good make, between 6 and 7 lbs. Address C. C. CURRIER, Newark, N. J. Sept 14-1t

FOR EXCHANGE.—An 8-gauge, 31-inch barrel, 12 1/2 pounds W. & C. Scott & son breech-loader, with leather case, loading implements, 75 brass ribbs, 75 duck decoys. Will exchange for a 7 or 14 pound gun, reliable maker. Address L. C. LOCK Box 540, Poughkeepsie post office, N. Y. Sept 14-1t

Miscellaneous.

B. F. NICHOLS & CO.,

SUCCESSORS TO

BOSTON SPLIT BAMBOO FISHING ROD CO.

36 Beach Street, Boston, Mass.,

MANUFACTURERS OF

FINE SPLIT BAMBOO

SALMON, BASS AND TROUT

FLY AND BAIT RODS

of best quality. Six strands from butt to tip

German silver mountings.

EVERY ROD WARRANTED.

Satisfaction guaranteed. Send stamp for price-list.

tr.

ARCHER'S DRAW AND LOOSE

GIVES SPLENDID SATISFACTION.—A HANDLE makes the DRAW much EASIER; Fingers never touch the string. A HAIR TRIGGER to loose instantly and smoothly. THE KEY TO THE FINGERES and the EASE OF DRAW gives ACCURACY TO THE AIM. Liberal Discount to Clubs of Six or More. Send for circular. Address S. E. FRENCH, Park Avenue Hotel, N. Y. City

The Kennel.

SUPERIOR SETTER PUPS,

AT A SACRIFICE.

On account of going West on a shoot, Sept. 25th, I have gone several weeks. I will sell the very fine Irish pups of my Gussie-Iory O'Moore litter (full particulars in my advertisement in Forest and Stream of Aug. 10th) very cheap. If taken immediately. Also a beautiful Gordon dog pup of my Pannie-Glen litter (see advertisement of Sept. 2d); a beauty; only \$15. Address immediately W. H. PERCE, Peckskill, N. Y. Sept 14-1t

FOR SALE.—My entire kennel of broken dogs now on hand, without reserve. Sportsmen in want of good business fluid dogs can secure a bargain by applying at once. I have some of the finest stock in the State. **CHAS. F. KENT, Monticello, N. Y.** Sept 14-1t

FOR SALE.—An extra good, thoroughbred, well-broken setter. Also a superior-broken Pointer. Address HORACE SMITH, 31 Park Row, N. Y. Sept 14-1t

The Kennel.

SETTERS, POINTERS AND RETRIEVERS broken to work with the gun on reasonable terms by an Englishman accustomed to the work for several years. Address JAS. LAKE, MAN, Carbondale, (Osage County), Kansas. Sept 13-3mos

FOR SALE.—BLOODHOUND PUPS.—Moyanising Prison bred, 25c each. Will trade pair for Colt or Fox gun, or Winchester "Express." W. S. ABBETT, Washington, D. C. Sept 14-1t

GORDON SETTER PUPPIES.—FOR SALE, six puppies by Dr. Allen's Glen, out of his Belle, now eight weeks old, and remarkably handsome. They won us the brace stakes at the Eastern Field Trials and Belle is an imported bitch from the kennels of S. E. Richardson, Esq., winner of two first prizes in England. For pedigree and particulars apply to J. W. Forest and Stream office. Sept 14-1t

\$30. ST. BERNARD \$30.

PUPPIES FOR SALE—SMOOTH-COATED.

Three months old, from Gretchen x Don. BOX 413 Hyde Park, Mass., Fairmount Kennel. Sept 14-1t

FOR SALE CHEAP.—Sensation IF, prize winner, of unusual beauty, color and intelligence; well broken; two years, eight months old, Lulu, broad ditch, fourteen months old; imported stock. Both, which I wish to sell at a perfect beauty, just ready for the field; prize winners back from generations. The above are all pointers and decided bargains. Obligated to sell. M. J. NEWHOUSE, Sept 14-1t Oueda, N. Y.

FOR SALE.—Three splendid setter dog pups, six months old, by Tucker's Royal (late Gaudin's) dog, and a good bitch, called Fanny. Apply to J. H. WHITCOMB, Sept 14-1t Astor, Mass.

FOR SALE.—A fine native setter bitch; liver and white ticked; two years old; thoroughly broken on ruffed grouse and woodcock; very staunch; fine nose, and a good retriever. Price \$30, cash. CHARLES F. KEMP, Sept 14-1t Monticello, N. Y.

K 9 KENNEL.

BREAKING, BREEDING AND BOARDING. Four more dogs wanted to fill up the number we shall break this season. With the present year we shall cease to break for others, and will appear in another branch of sporting business at our old headquarters, Delaware City. Due notice will be given. E. & C. VAN CULIN, P. O. Box 210, Lakeside, Dover, Del. Sept 14-1t

WILKINSON & LENNOX,

212 BROADWAY, NEW YORK,
MANUFACTURERS OF

MEDALS,
BADGES AND EMBLEMS
OF EVERY DESCRIPTION.
Special Designs Sent Free
UPON APPLICATION.
Anything in the Jewelry Line Made
to Order.



The Kennel.

SECOND ANNUAL

BENCH SHOW OF DOGS,

GIVEN BY THE

ST. LOUIS KENNEL CLUB,

Will be held during the great St. Louis
Fair, on the Fair Grounds, October 5th,
6th, 7th and 8th.

Prize Lists and forms of Entry can be
had of CHARLES LINCOLN, Supt.

Office 604 North Fourth St., St. Louis, Mo.

Entries close September 20th.

Sept 25

MANGE
SCRATCHES.

GLOVER'S IMPERIAL MANGE CURE is war-
ranted to cure all kinds and conditions of mange
or skin diseases of any nature on dogs or cattle
without injury to the animal. One application
is usually all that is necessary. For SCRATCHES
in HOCKS it has no equal. H. GLOVER,
Sole prop'r Imperial Kennel, Tom's River, N. J.
Agents: Conroy, Blisset & Malleson, 63 Fulton
St., N. Y.; John P. Lovell & Sons, Dock Square,
Boston; Jas. C. Grubb & Co., 712 Market St.,
Phila.; P. P. Taylor, 27 East Madison St., Chicago;
Brookes, Hilder & Co., 604 North Fourth St., St.
Louis. Price, 50 cents.

Practical Hints on Dog Breaking.

By W. H. HOLABIRD (send stamps), 25 cents.
A colored lithograph of the celebrated Joe,
JR., the champion setter of America, 25 cents.
A sure cure for mange; receipt for 25 cents.
Broken setters, pointers and spaniels on hand,
also a lot of pointer, setter, spaniel and bound
puppies for cheap sale.
Address W. H. HOLABIRD,
Secretary,
Valparaiso, Ind.

Sept. 9-St

CHARTER OAK KENNEL.

In the Stud.
RED IRISH SETTERS.
San Pedro (Elcho-Lady Palmerston), \$25.
Mike (Elcho-Nell), \$25.
Wedgewood (Elcho-Stella), \$25.
Oakdale (Elcho-Nell), \$25.

ENGLISH SETTERS.

Voltaire, \$25.
Hopful, \$30.
Address CHARLES DENISON,
Hartford, Conn.

Sept. 3-11

NEVERSINK LODGE KENNELS.

IN THE STUD.—Rough-coated St. Ber-
nard, "Marco"; Newfoundland, "Keeper";
pointer, "Crockett"; Blue Belton, "Decima-
dash"; Irish set'er, "Rover II." and in season
puppies for sale out of St. Bernard "Brunfels";
champion pointer, "Queen," champion Gordon
"Beauty," Blue belton "Silk," Irish setters
"Moss" and "Biddy," cocker, "plum," collies
"Maid" and "Ladies." Besides puppies I have
for sale yard and field broken dogs. Write for
full pedigree and catalogues to
A. GODEFROY,
Guymard, Orange County, N. Y.

MICKE'S

Never Failing Dog Distemper Cure
and Flea Destroyer.

For sale by all Druggists at 25 Cents each.

Wholesale Agents—Charles L. Ritzman, 943,
Broadway, N. Y.; Smith, Kline & Co., 309 N. Third
Street, Phila.; Finley & Thompson, 35 Magazine
Street, New Orleans, La.; W. H. Holabin, Val-
paraiso, Ind.; Trimble & Kleibacker, Baltimore.
Cure or Destroyer sent by mail on receipt of
25c. to L. A. MICKE, Easton, Pa.

ST. BERNARDS FOR SALE.—The un-
derigned, wishing to reduce his kennel, offers
for sale several magnificent imported Mount St.
Bernard dogs and bitches, carefully selected from
the best European strains. To be sold for no
fault. For prices, pedigrees, etc., address
LE ROI Y. COLLINS,
Lancaster, Mass., U. S. A.

FOR SALE.—Three Setters, ten months old,
orange and white. Full pedigree. J. H.
STRELE, Ellington, Conn. Sept 19

The Kennel.

E. B. GOLDSMITH,

Custom House and Forwarding Agent,
58 WALL STREET, NEW YORK.

RECEIVES AND FORWARDS Dogs,
Fowls, etc., to any destination. Kennel
Clubs, Sportsmen and others, intending to import
dogs from Europe, should have their stock con-
signed to him. Information furnished regard-
ing the best methods of importing, shipping, etc.

Imperial Kennel

Setters and Pointers thor-
oughly Fixed. Boys.
Young Dogs handled with
skill and judgment.
Dogs have daily access to salt
water.

N. B.—Setter and Pointer
puppies; also, broken dogs for sale; full pedi-
grees. Address H. C. GLOVER, Toms River, N. J.

LACHINE KENN IS.

I HAVE moved my kennel of cockers to
the vicinity of New York. Will have pups
before October. Cora, Flirt, Madcap, all to be
bred to Bijou, this week, June 21st.
GEO. D. MACDOUGALL, P. O. Drawer 4312,
June 24-11. New York.

FOR SALE,

Two dog and one bitch pointer puppies, by Mr.
Edmund Orrell's Champion Rush, out of my
white, all very strong and handsome. Price \$30
—dog or bitch.

POINTER BITCH—"CHARM."

Same sire and dam, one year old, very handsome
and perfect in every way; will be a capital work-
er. I reserved her for my own use, but find
I have more dogs than I can handle, and will part
with her. Price \$75. GEO. VAN WAGENEN,
212 West street, New York City. July 15-11.

PINE LODGE KENNELS.—I am pre-
pared to take a limited number of dogs,
either setters or pointers, and train them thor-
oughly. I give my puppies seven months' work
out of the breeder, and guarantee satisfaction if
the dog has all the natural instincts and doc-
trines on application. Prices, \$50 and \$75, ac-
cording to length of time I keep the dog, with
discount to parties at long distances. A.
WINTER, Cairo, Thomas County, Georgia. Oct 2-11

\$15 will buy a pure Irish setter dog, 4 1/2
months old, having one cross off back
and two of Plunket. Address, E. J. ROBBINS,
Wethersfield, Conn. Aug. 19-11.

RED IRISH SETTER PUPS FOR SALE.
—Several handsome, pure red Irish setter
puppies, whelped July 24th, 1880; sire, champion
O'More; dam, my red Irish bitch, Nora
(champion Bickley of Fairy), winner first prize
at New York, 1880. Price: Bitches, \$20; dogs,
\$35. Address C. H. DAXTON, Peckskill, N. Y.
Sept 1-11

FOR SALE.—Three handsome red Irish setter
pups, eight weeks old, large, strong and
healthy, out of Nora, she by champion York x
Belle; and one brace of handsome Lovelovely
pups out of Belle, she by Pride of the Border x
Kilby and Warwick, both parents being thor-
oughly broken and prize winners. Prices reason-
able. For particulars and full pedigrees, in-
quire of the COMESTOGA KENNEL, 332 East
Orange street, Lancaster, Pa. June 11-11

RORY O'MORE KENNEL.—Champion
Rory O'More in the stud. The handsomest,
as well as one of the best field and best bred red
Irish dogs in the United States. Winner of first
prize at New York, 1877; champion at New York,
1878; champion at Hudson, 1879, and winner of
the gold necktie at New York, 1880. For sale,
thoroughbred pups. Address W. N. CALLEN-
DER, Albany, N. Y. June 24-11

FOR SALE.—A number of well broken
pointers and setters. H. B. RICHMOND,
Lakeville, Mass. Aug. 18-11.

CHARTER OAK KENNEL.

FOR SALE.—A fine red Irish dog, one
and a half years old; sire Elcho, dam im-
ported Stella. Also a few red Irish puppies, by
Elcho, Oakdale and San Pedro, and a litter of
high bred cocker spaniels. Pedigrees on ap-
plication. CHAS. DENISON, Hartford, Conn.
Sept 9-11

GLEN—B. and T.; by Colburn's Dash ex Mul-
lin's Belle. The above dog, winner of first
in brace stakes of the Eastern Field Trials; by
the allowed service a few bitches of approved
form and blood. Stud fee \$25, and \$2 for
ground. Address
H. F. ATEN, M. D.,
34 Hanson Place,
Brooklyn, N. Y.

Miscellaneous Advertisements.

CORDUROY SHOOTING SUIT,
A SPECIALTY.

FROM GOODS OF MY OWN IMPORTATION—DEAD GRASS COLOR.—
ALSO, ALL-WOOL WINDSOR CORD, VELVETEEN, FUSTIAN CANYAS—all prices.
Send for Price-List and Samples. Address

F. L. SHELDON, Rahway, N. J.

HODGMAN & CO.,
425 BROADWAY AND 27 MAIDEN LANE, NEW YORK,
ARE OFFERING THE LARGEST STOCK OF
RUBBER FISHING OUTFITS,
COMPRISING
FISHING PANTS,
FISHING BOOTS,
BLANKETS,
LIGHT, BLACK, WHITE OR TAN COLOR COATS,
AND COMPLETE
RUBBER SPORTING OUTFITS.
[ESTABLISHED 1839.] Send for Catalogue.



The Kennel.

Cathery's Dog Soap,

PRIZE MEDAL.



C. CATHERY, LONDON:
FOR WASHING ALL KINDS OF DOGS.

Will destroy Fleas, cleanse the skin and rid
from Scurf and Smells, making the Coat fine
and glossy, without giving cold or doing the
least harm to the animal and safely and effec-
tively cure the Mange.

PRICE, 50 CENTS.
FOR SALE BY ALL DRUGGISTS.
Wholesale Agents
McKESSON & ROBBINS,
NEW YORK.
Sample Cake sent on receipt of 50 cents.
July 8-13.

A RARE CHANCE.—For sale, English
setters: Don, a splendid large orange
white ticked dog, brother to Champion France,
but superior every way, \$30; Moll, a very beauti-
ful bitch, orange white, black points, two first
prizes, \$35; Dick, a very fine dog, orange white
black points; Russa II., orange white ticked,
second prize; she with Dick, \$100; the best brace
I ever shot over. Three orange white ticked
dogs, twelve months old, very fine, full of hunt,
\$25 each; also puppies ten months old, Gordon
and Laverack combined. Bob, black, white and
blue ticked; Jim, black white tan, \$15 each. A
brace, black and white, well matched, \$25. A
black white tan gyp, five months old, \$10. Pups
two months old, out of Russa II. by Don,
orange white ticked, a brace for \$30 if taken by
July 1st. They cannot be beaten for looks and
natural field qualities. This is a chance you can-
not afford to lose if you want fine stock for very
little money. Address ASA L. SHERWOOD,
Skanateles, N. Y. June 24-11

OUTLET KENNELS.—For pure Cocker
Spaniels of all ages—also in the stud, pure
cocker Skip II., liver and white, flat-coated, nice
feather; will serve bitches at \$10; litters guar-
anteed. Address ROBERT WALKER, Keeper
Outlet Kennels, Franklin, Del. Co., N. Y.

Dr. Gordon Stables, R. N.

TWYFORD, BERKS, ENGLAND,
Author of the

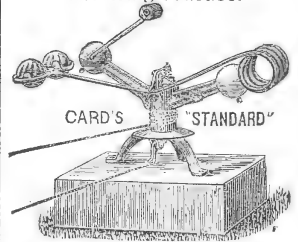
"PRACTICAL KENNEL GUIDE," & C.
begs to inform Ladies and Gentlemen in America
that he purchases and sends out dogs of any de-
sired breed, fit for the highest competition.
N. B.—A bad dog never left the Doctor's Ken-
nels. dec 19 11.

THE BLUE STAR KENNEL
OR THE
COCKER SPANIEL
BREEDING KENNEL

M. P. MCKOON, FRANKLIN, DEL. CO., N. Y.
I sell only young stock. I guarantee sat-
isfaction and safe delivery to every customer.
These beautiful and intelligent dogs cannot be
beaten for ruffed grouse and woodcock shooting
and retrieving. Correspondents inclosing stamp
will get printed pedigrees, circulars, testimo-
nials etc.

1880.
Card's Standard Trap

For Wing Practice.



Patented May 7, 1878—April 22, 1879.
Double, Single, Rotating, Stationary.
Every way (except at Shooter). Any de-
sired direction. All in one Trap
and only one Spring used.

Price \$10 at Factory.
NO CHARGE FOR BOXING.

Sole agent in the United States for W. W.
GIBBS'S SPECIAL GUN, with all the im-
provements. Price, in trunk gun-case, with
complete set of implements, \$35. Send for cat-
alogue of traps, guns and sporting goods.

WILL H. CRUTTENDEN,
General Agent, Cazenovia, Madison Co., N. Y.

KNAPP & VAN NOSTRAND,

POULTRY AND GAME

Nos. 289 & 290 Washington Market, N. Y.



MUSTACHE AND WHISKERS.

Doyle's Mustache and Whisker Powder is the
best and most reliable. It is made from the
finest and most pure materials. It is
wholly new and never before. 25 cent
in every drug store. Address: W. H. H. H.
Doyle, 215 1/2 St. for sample and price. WHITE & CO.,
New York, Agents. (Circulars sent)

The Kennel.

DOGS RID OF FLEAS AT ONCE BY
using "A N. Y. Flea Powder. Sent in
patent box on receipt of 25 cents by
ADAMS & CHASE,
Aug. 19-11mo. Sherborn, Mass

3as! Fleas! Worms! Worms!

Steadman's Flea Powder for Dogs.
A BANE TO FLEAS—A BOON TO DOGS.
THIS POWDER is guaranteed to kill
fleas on dogs or any other animals, or money
returned. It is put up in patent boxes with
a red pepper box top, which greatly facilitates its
use. Simple and efficacious.

Price 50 cents by mail. Postpaid.

ARECA NUT FOR WORMS IN DOGS

A CERTAIN REMEDY.
Put up in boxes containing ten powders, with
full directions for use.

Price 50 cents per Box by mail.
Both the above are recommended by ROD AND
GUN AND FOREST AND STREAM.

CONROY, BISSET & MALLESON,
63 Fulton Street, N. Y.
HENRY C. SQUIRES,
1 Cortlandt Street, N. Y.

Hotels and Boutes for Sportsmen.

RIVERSIDE HOUSE, Forked River, Ocean County, N. J. The best and most convenient location for the fishing and gunning grounds of Barnegat Bay. House first class; reasonable rates. Fine sport in shooting and week-boarding now. **CLAS A. SMITH,** Forked River, N. J.

SPORTSMEN will find good accommodations, guides, dogs, deer, partridge, woodcock, pigeons, ducks, rabbits and squirrels in fair numbers. Address **LEAH M. BRADLEY,** Bircel, Sullivan county, N. Y. References given.

LONG ISLAND R.R.—SPRING SEED— L. L. taking effect March 14th, 1880.—Leave **RUNTER'S** Pk (Flatbush Ave.) 11:45 a.m. (earlier for)

Baylton, 8:45 A.M., 3:35, 4:45, 5:55 P.M. Sundays, 9 A.M.

Col. Pk & Whitestone, 7:35, 8:45, 10, 11:35 A.M., 2:35, 3:45, 5:55, 6:45, 7:35, 9:15, 10:45 P.M.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M.

Flushing, 6:25, 7:35, 8:45, 10, 11:35 A.M., 2:35, 3:45, 5:55, 6:45, 7:35, 9:15, 10:45 P.M., 12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 3, 5:35, 7, 10 P.M.

For Rockaway, 8:35, 11 A.M., 4:45, 5:55, 7 P.M. Rockaway Beach, 11 A.M., 4:45 P.M. Sundays, P.M. and 6:35 P.M.

Great Neck, 6:25, 7:35, 11:35 A.M., 4:45, 5:55, 6:35 P.M. Saturday night, 12:15, Sundays, 9:35 A.M., 5:35 P.M.

Garden City, Queens and Hempstead, 8, 10 A.M., 1:35, 3:45, 5:55, 6:45 P.M. From Flatbush av. daily, except Sunday and from Hunter's Point, Monday, Wed., Fri. and Saturday, 12:15 night.

Wednesdays and Sundays only from Flatbush av. 10 P.M. Sunday, 9 A.M., 5:35, 5:55 P.M.

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Richmond Hill, Glendale, 8:35, 11 A.M., 3:35, 4:45, 5:55, 6:45 P.M. Monday, Tuesday, Friday and Saturday nights, 12:15, Sundays, 9 A.M., 5:35 P.M.

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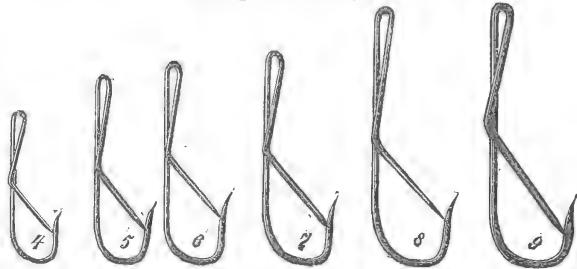
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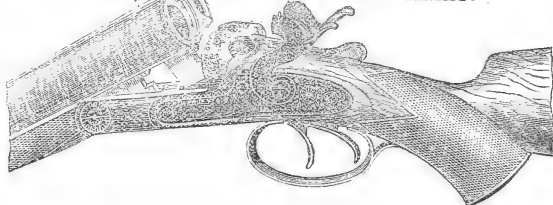
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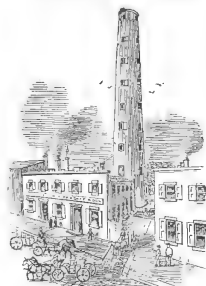
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FOREST AND STREAM ROD & GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

[Entered According to Act of Congress, in the year 1879, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington]

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NEW YORK, THURSDAY, SEPT. 23, 1880.

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FOREST AND STREAM.

NEW YORK, THURSDAY, SEPTEMBER 23, 1880.

A GENEROUS GIFT.—We owe to the kindness of one of our oldest and most valued subscribers, whose modesty forbids our mentioning his name, but who is well known to the sportsmen of this State, a complete file of **FOREST AND STREAM**. The gentleman to whom we are indebted for this gift has taken the paper from its first number. Complete files of the **FOREST AND STREAM** are of great value, and we cannot too heartily express our gratitude for this gift. Our friend, speaking of his volumes of the paper, says: "It is too bad to think that they may not be used by me in the future, and I desire to present them to somebody that they may be used. Do not think that I do not prize every number, for, as a sportsman, I do; but as I grow older I have not time to re-read them. Your paper I value, and until I die I shall remit annually, for I welcome its arrival and go through it with care."

A COMPLIMENT TO OUR KENNEL EDITOR.—We learn by the public prints that the kennel editor of **FOREST AND STREAM** has been nominated by the Executive Committee of the Nebraska State Sportsmen's Association. While desiring to express his high appreciation of the compliment thus paid him, the kennel editor feels obliged to decline it. Owing to his absence from New York no mention of this was received until the 20th instant, or his opinion in the matter would have been earlier defined.

Manifestly improper for the representative of a publication to criticise an exhibition of this kind to the public, and the kennel editor of this paper has expressed our views on the subject.

RECORD.—The unprecedented score of 224 out of 225, made by Mr. William Gerrish, at Walworths long range practice very close up to the point of perfection. There is no reason to doubt the score; it was made in a regular match, and on a day which, from the report, invited and almost provoked such a record. Mr. Gerrish is a young man who has given much time and careful endeavor to long-range work, and being in a coterie of marksmen where abundance of leisure gives ample opportunity for the most exact and careful study of the minutiae of rifle shooting, it is not wonderful that such a result should have been attained. Nevertheless, with so many chances against his performance Mr. Gerrish is to be congratulated on his feat, and it will doubtless be a long time before he finds himself dispossessed of the "best on record."

THE "DITTMAR SPORTING POWDER."

We shall show in this article:—

1st. That the so-called "Dittmar Sporting Powder" is a highly dangerous compound when used in firearms.

2d. That Mr. Carl Dittmar thoroughly understands this.

3d. That for the past five years, from the date of its first manufacture until the present, he has strenuously denied the dangerous nature of the powder.

In doing this we shall advance no theories, but shall confine ourselves strictly to what are, to the best of our knowledge and belief, facts.

The public may expect from Mr. Carl Dittmar, or from those interested with him, a denial of these facts.

No denial can alter facts.

We may, in justice to ourselves, premise something of the circumstances. The "Dittmar Sporting Powder" has been on the market since the winter of 1874-5. The first notice of it in the **FOREST AND STREAM** will be found in Vol. III., page 26, Feb. 4th, 1875, and a notice in the **ROD AND GUN** at about the same date. From that time until the present, before and since the consolidation of the two papers, our columns have always been open for full and free reports of the use of the powder by sportsmen. They have also been open, up to a fortnight ago, to Mr. Carl Dittmar and those associated with him in the manufacture and sale of the powder. Accidents with the compound have been numerous and serious. It has been our custom to publish, together with commendations of the powder, such reports of accidents as came to us. The Dittmar powder manufacturers have always been accorded a fair chance to explain away these accidents. How well they made use of it is shown by the fact that the product is still in the market.

There has come a change; affairs are altered. Why is this?

Previous to June 10th, of this year, we had published several letters from Dr. S. P. Nash, of Philadelphia, Miss. His communications showed him to be a man well acquainted with the use of fire-arms and a practical sportsman. On that date was published a communication from Dr. Nash recording "A Disastrous Experience with Dittmar Powder." The writer alleged that he had loaded a Parker gun with 34drs. "Dittmar Powder." FFF, that the gun was by this charge shattered, blowing off one of his thumbs, subjecting him to many weeks of suffering and confinement, with a prospect of many more, making him a cripple for life, and probably debarring him from the further practice of his profession of dentistry.

In the issue of June 17th following, the Dittmar Powder Manufacturing Company published a reply, professing to discredit the statements of the Nash letter, and calling for proof.

In response the can containing the remainder of the powder was sent to us, and a portion of this powder handed over to the Dittmar Powder Manufacturing Company.

In our issue of July 15th, following, we published letters from Dr. Nash and others, proving conclusively the truth of his previous report, and showing the injury to his hand to have been more serious than he had before anticipated.

The Dittmar Powder Manufacturing Company sent us, and we published, a disclaimer of responsibility, it being substantially a denial that the powder was of their (the present Company's) make, or that it was strong enough—as tested by them—to have produced the alleged accident. Then, having demonstrated that the old powder was of a much weaker grade than that now manufactured and could not be dangerous, they gravely warned the public against buying it.

This explanation by the Company was unsatisfactory and inadequate.

It was the old story—the repudiation by Mr. Carl Dittmar of powder manufactured by himself. The files of the **FOREST AND STREAM**, of the **ROD AND GUN**, and of the paper since its consolidation, tell this story. Our readers are invited to refer to their files to see that our quotations are correct, are not garbled, and are fair.

Mr. Dittmar professed to be able to make his powder uniform so far back as the summer of 1875.

FOREST AND STREAM, Vol. IV., page 300. Letter from Carl Dittmar, dated at Neponset, Mass., June 5th, 1875:—

"I am now making a much slower powder, as many consider it too quick, and I will stick to it and make it always uniform as soon as I find that the sporting community like the latest issue best. The method of manufacture involves absolute exactness of strength, and if your correspondent, Mr. D. C. Allison, decides which kind he likes best I can give it to him always the same." (Italics ours.)

Reputation No. 1.—Mr. Dittmar having thus put himself on record, we should hardly look for the following when he came to change his business relations:—

FOREST AND STREAM, Vol. V., page 124, Sept. 30th, 1875. Advertisement of the "Dittmar Powder Manufacturing Company, manufacturers of Carl Dittmar's Patent Sporting Powder, Blasting Powders, etc.; Neponset, Mass. I have succeeded in overcoming all objections that may have been raised to the kind of Sporting Powder previously manufactured by me. By an entirely new process, and with the assistance of new machinery, I am now able to make the grains as hard as those of black powder, thus avoiding the great compressibility of the kind first introduced, and allowing an even loading every time. In addition to the greater density of the new powder, I have also obviated the great rapidity of ignition. There is now no fear of overloading. No necessity for any special directions for use; simply use it like black powder and use the same quantity in bulk.

"The powder can now be used from an ordinary powder flask. The same kind of powder can be used for both shot guns and rifles. The sizes and numbers for the grain are the same as those for black powder. The medium size is best adapted for general purposes, the largest size for small bores, and the finest size for large bores.

"Every package of the new powder bears my signature. None genuine without it.

"I manufacture none of the old kind, and all connection with my former agency, the so-called Dittmar Powder Company, is at an end. Please address all orders to me. Any letters unanswered or orders not filled since Sept. 1st will be immediately attended to if parties will please re-write to me. I will exchange, when requested, any of my powder bought before that date for the new kind.

"My best thanks to the friends of my new powder, who have by their suggestions helped me to make it perfect, so that I now have no doubt of its complete success. **CARL DITTMAR.**"

He also advertised this in the **ROD AND GUN**, see issue of Oct. 2d, 1875, page 13:—

"Every package of the new powder bears my own signature on top of cover; without it, do not consider it genuine. I do not manufacture any more of the old kind, and all my connections with my former agency (the so-called Dittmar Powder Company) are ended."

The manufactory, be it understood, was all this time at Neponset, Mass., and Mr. Dittmar was the man who made, or superintended the making of, all the powder. The Dittmar Powder Manufacturing Company (No. 1) then also adopted the tactics afterward repeated by the Dittmar Powder Manufacturing Company (No. 2). They attempted to turn the responsibility of the working of the powder away from themselves and upon "the old company":—

ROD AND GUN, May 27th, 1876, Vol. VIII., page 135. Letter from Carl Dittmar, Neponset, Mass., May 20th:—

"There are two kinds of my powder in the market: the new kind, which I am manufacturing now for the last eight months, which comes in regular powder flasks with my signature on each. This I warrant, and my former advertisements and all circulars say that I only consider that genuine which bears my signature on the can. . . . Now, a few days ago, I learned through a communication from Chicago, that a large amount of old powder is still kept by Chicago dealers, of which a great deal is not fit for use, not having gone through the last stage of manufacture. All this powder has been sold without my knowledge and consent by the company I have been connected with last summer. . . . Since manufacturing the new kind no accidents have come to my knowledge, and I sincerely believe that the powder in its present state is safe, even safer than black powder, and I am ready to prove it at any time. If your correspondent, Abe Dacotah, from Iowa, will send what he has of that 'workless and miserable stuff,' as he calls it [I will load some and send it back and try some in the presence of others], and if I fail to prove with that condemned kind that it is at least equal to any black powder, then I will say Abe Dacotah is right."

The Dittmar Powder Company in Boston sold the powder made at Neponset, and turned over to them by Mr. Dittmar, the manufacturer of it. Does any one suppose that Mr. Dittmar, at this stage of his enterprise, would let powder go from Neponset which was not ready for the market? His letter, like his advertisements, can be made to mean nothing but a repudiation of his own powder.

But the powder made by him, under the new firm name, was all right, for he himself says:—

R. & G., Dec. 4th, 1875, page 157.—I have succeeded in perfecting my rifle powder, as well as I did lately with my shot gun powder. I warrant its safety, cleanliness, strength, little recoil, smoke, report, and its regularity in shooting, both for rifle and shot gun. Try and see. Use it like black powder; no need of any more instructions.

R. & G., March 11th, 1876, page 333.—Dittmar powder. Warranted for . . . its absolute regularity in shooting, both for rifle and shot gun.

Mr. Dittmar had no opportunity to repudiate this powder, for the formation of his third (3) company was too remote to allow of this. The "Dittmar Powder Manufacturing Company" (No. 1), followed the "Dittmar Powder Company" (No. 1), into dissolution, and for a time the manufacture of the powder was nominally suspended. In the *FOREST AND STREAM*, of March 21st, 1878, appeared an advertisement of the Dittmar Powder Company (No. 2), which informed the public that the powder was at that time uniform and of Mr. Dittmar's own manufacture:—

"By new process of waterproofing this powder is now made absolutely uniform. Mr. Carl Dittmar will give his whole time and skill to its manufacture."

Further he tells us that the powder is tested:—

P. & S., Nov. 7th, 1878, Vol. XI., page 290.—Letter from Carl Dittmar, dated Binghamton, N. Y., the location of the manufactory:—"Every batch of my powder is tested thoroughly, before it is sent out."

Moreover, he alleges it to be safe:—

P. & S., Nov. 21st, 1878, Vol. XI., page 331.—Letter from Carl Dittmar: "In answer, . . . I have to say, that my powder is absolutely safe when used according to instructions."

The advertisement of the Dittmar Powder Company (No. 2), also asserts it to be "efficient, uniform and safe."

Two days after his letter of Nov. 2d, 1878, it appears the test by the pressure gauge was adopted, for he tells us:—

FOREST AND STREAM, March 6th, 1879, Vol. XII., page 93. Letter from Carl Dittmar, dated at Binghamton, N. Y., Feb. 23d, 1879:—

"Since November 5th last, all I have manufactured has been tested with the Government pressure gauge, and is perfectly reliable and safe with heavy charges. As I expect our own pressure gauge in a few days from the Springfield armory, I shall not let a single pound of powder go out without having it tested thoroughly for strain.

"The kind I made last year up to Nov. 5th is also perfectly safe if used according to directions and with no heavier charges than recommended in the circulars."

Again Dittmar indorses the powder made subsequently to Nov. 5th, 1878:—

FOREST AND STREAM, June 19th, 1879, Vol. XII., page 393, commenting on an accident with his powder, Carl Dittmar says:—

"I think the powder must have been purchased before the 5th of November last, for from which time I made the new and slower kind. Of this kind, which is marked as tested with heavy loads, there has not been a single complaint yet. The powder referred to in 'Pon's' letter was of the kind Capt. Bogardus recommended and has used in all his exhibitions. I myself should not like to use it in heavy charges, but I think it is impossible that 3 drs. could do any harm. I think there must have been an accidental overcharge, the measure being wrong, or something of the kind. If he will send me a sample in a glass bottle I will test it in the Government pressure gauge and give honestly the result; if it is too good for safety I will admit the fact. The powder now made is all tested by the pressure gauge. A case of overloading cannot happen with the new powder, and I do not give any extra instruction. The powder will work no matter how it is loaded."

Just here we may explain that the date, Nov. 5th, 1878, shows that the test by Government pressure gauge was employed nine months before the "Dittmar Powder Manufacturing Company" (No. 2), succeeded the Dittmar Powder Company (No. 2). It was the practice to take samples of the powder to the Springfield Armory and test them there. And further, that this thing may be clearly understood, the gauge made for the Dittmar manufactory was exactly like the Government pressure gauge, and was shipped to Binghamton from the Springfield Armory March 13th, 1879, five months before the present Dittmar Powder Manufacturing Company (No. 2) succeeded the Dittmar Powder Company (No. 2). We are thus particular about this to show that the old Company possessed the same instruments for testing the powder that the present Company have.

Having come safely through this tortuous course, we must not be surprised by his

Repudiation No. 2, which came in the form of a letter from the business manager of the Dittmar Powder Manufacturing Company (No. 2).

"Mr. Von Lengerke sends me the inclosed letter, which I have thought proper to send you for your perusal, which done, please return."

"He is now engaged in testing shells loaded by Squires, and expresses the opinion that S. is engaged in gathering up all the old condemned powder and sealing and loading it."

"A. J. PARKER."

In due time we received and published the report of their employé, Mr. J. Von Lengerke, who was "glad to say that the powder had no excessive strength, and that the accident reported cannot have been the fault of the powder." The report of their employé was accompanied by a letter which contained the extraordinary sentences quoted below:—

FOREST AND STREAM, Aug. 5th, 1880, Vol. XV., page 10. Letter from Dittmar Powder Manufacturing Company (No. 2),

"We positively declare that the Nash powder was not of our manufacture, and was not sold by us, and was never in our possession. So far as that is concerned, we are disinterested parties, except inasmuch as it bears the name of Dittmar powder, and we think that our tests have abundantly proved that even that was not dangerous, but fell below the powder which we put forward as our standard."

"Mr. Nash's suggestion that the can of powder may have been tampered with is something with which we have nothing to do. If it was, it was not our powder that was tampered with."

"We shall, following your suggestion, advertise more fully to the world that we have never sold, nor will we ever sell without due notice to the public, any powder whatever, either unloaded, unstamped, or without all proper directions for its use; and we hereby caution the public against buying any unsold so-called Dittmar powder."

The powder, thus it is seen, has been made and sold, within the short space of four years, under no less than five firm titles, namely—Carl Dittmar, Dittmar Powder Company, Dittmar Powder Manufacturing Company, Dittmar Powder Company (No. 2), and Dittmar Powder Manufacturing Company (No. 2).

Now, remembering that all the "Dittmar Sporting Powder" ever manufactured was made by Mr. Dittmar personally,* or under his supervision, or by his wife personally, or under her supervision, or, at least, was made and sold by firms of which he was the principal, or of which he and his wife were the principals—how shall we suitably characterize this action of a man engaged in the manufacture of a commercial product, time and time again warning the public against his own product?

What warrant had we that by and bye, Mr. Dittmar having formed a Dittmar Powder Company (No. 3), they would not in turn repudiate the powder of the present Dittmar Powder Manufacturing Company, and warn against its use, because the cans had no label on the bottom, and so on to thirteenthly? Or could the purchaser of the powder now sold by the "Dittmar Powder Manufacturing Company" (No. 2) afford to keep it six months to find out whether it was the "condemned" and dangerous kind or not?

Clearly, while the "old condemned powder" bosh might satisfy the manufacturers, it was no explanation to offer to a man who had had his thumb blown off and his business ruined, nor to other men who, by the use of this powder, were running the risk of a like calamity.

We refused to publish the letter of Aug. 5th without a protest that it dodged the question at issue. We set to work to determine the true character of the powder. Our duty to ourselves demanded this investigation. Much more did our responsibility to our readers imperatively call for it.

We accordingly began the investigation of the nature of the powder, and said so in our issue of Aug. 5th, Cognizant of the fact that we were studying the powder, and after their agent had been informed that we were about to publish the results of our investigation, the Dittmar Powder Manufacturing Company, upon the trumped up pretext that our refusal to publish what we thought to be a libelous letter proffered by them was unfair, judiciously withdrew their advertisement Aug. 31st.

Writing this letter was a characteristic attempt to turn the affair into a personal controversy, in the heat of which the real question of the safety of the "Dittmar Sporting Powder" should be lost sight of.

So much for the circumstances, which, fortunately for ourselves, fortunately for our readers and fortunately for the public, led us to determine the true character of the "Dittmar Sporting Powder."

Right here, and once for all, we may say that while the *FOREST AND STREAM* has in times past been duped by Mr. Dittmar's seeming honesty of purpose into serving his end, yet the present management has never been committed to an editorial indorsement of the powder. That we did not realize the true nature of the compound is our only excuse for having even passively permitted our columns to be used in any way by him.

To clearly comprehend the different natures of different explosive agents, some knowledge of chemistry is requisite. When Mr. Dittmar is asked as to the composition of his powder, his favorite way of responding to or evading the question is to retort, "You are not a chemist; therefore, I cannot explain it to you." It will not be necessary hereafter for the readers of this journal to go to Mr. Dittmar for their knowledge of the composition of his powder, nor for a sufficient understanding of the principles of chemistry to fully comprehend the true nature of that compound. They will find all that in this paper.

* As to the past, the quotations sufficiently prove this. In the present concern Mr. Dittmar and his wife own, or did own, a 55-100 interest. An employé of the Dittmar Powder Manufacturing Company told us, when we went there for some powder, the other day, that the stock was small, because Mr. Dittmar was in the Catskill Mountains, and in his absence no powder could be manufactured. We had reason to believe, at that time, that Mr. Dittmar was in Europe, but this lack of geographical knowledge on the part of the employé does not alter what we are trying to show, namely, that Mr. Carl Dittmar is now, as he has always been, the responsible party in the manufacture and sale of "Dittmar Sporting Powder."

The present Dittmar Powder Manufacturing Company was formed on, or about, Aug. 4th, 1879. Their manufactory is at Binghamton, N. Y.

United States Circuit Court, Southern District of New York, Nov. 13th, 1879, Carl Dittmar, being duly sworn, doth depose and say: "Everything at Binghamton is attended to by myself and wife in person."

This is not the place for a treatise on chemistry. None is necessary. We shall, however, attempt to put this whole thing so clearly and as concisely as possible, that whether chemist or not, no man who reads it need be baffled longer by Mr. Dittmar's chemistry bluff.

I.

THE CHEMISTRY OF EXPLOSIVES.

Various explosive agents are associated in our minds with different degrees of explosive power and effect. Thus, black gunpowder is a material with which we are all familiar; we know it to possess great explosive power, yet with certain precautions we do not hesitate to handle and employ it.

Nitro-glycerine, on the contrary, is known in a vague way at least to be in its explosion vastly different from gunpowder. Its might is so tremendous, its effects so terrific, that the very name of the compound is significant of uncontrollable force; we hesitate to handle it, and its presence inspires us with dread.

At the beginning of our study of explosives then the question meets us, Are all explosive compounds of the same inherent nature? Do they differ only in their manifestations of power according as that exhibition of power is made by the conditions of the explosion more or less complete, or may one form of explosion be radically different in its nature from another? Evidently we must determine this before going further.

The teachings of chemistry on this point are beautifully simple, clear and conclusive. To make them plain we need but to outline some of the fundamental and familiar principles of that science. We begin at the beginning, with the molecule.

Molecule.—A molecule is the smallest mass into which any substance, solid, liquid or gas, can be divided by physical or mechanical processes. The text-books tell us that the limit of the measurement of molecules is reached at about the one-five hundred millionth of an inch. A molecule is infinitesimally small, and it is important that we have a clear appreciation of this, for small as it is, in the molecule we shall find the key to this whole inquiry.

Molecular energy.—Molecules have constant motion, most free in gas, less free in a liquid, least in a solid. It has been estimated that the mean velocity of the molecular motion of hydrogen gas, under a certain given pressure, is 6,097 feet per second. Molecules have weight; they have motion; motion and weight give energy. The movement, and therefore the energy, of molecules vary as the temperature of the mass. Therefore, to increase the temperature, is to increase the molecular energy.

Pressure.—In gases the movement of the molecules is in straight lines, and the movement of their aggregation is, therefore, in every direction to the surface of the mass. The surfaces of the containing body are constantly bombarded by these molecules. The aggregation of this bombardment—millions of molecules moving at the rate of thousands of feet per second—is what we call pressure.

Pressure, it will be readily understood, varies with the molecular energy; this, in turn, varies with the heat. To increase the heat, then, is to increase pressure. Increased pressure demands increased resistance by the containing body, or else yielding, and an increased volume. Also, to convert a solid mass into a gas, is to increase, or to release, its molecular energy.

Atoms.—Mechanical subdivision stops with the molecule. Chemistry goes beyond this, and conceives each molecule to contain atoms. It does more than this: it actually breaks up the molecules, and, combining the atoms of one with the atoms of others, forms new molecules, which are wholly different from the old.

Chemical reaction.—Such a change is termed a chemical reaction. It differs from a mechanical process. For instance, water is a liquid mass made up of molecules. Each molecule of water, it has been determined, is made up of three atoms, two of hydrogen and one of oxygen. Now, a drop of water may be, by mechanical processes, divided and subdivided into the smallest mass attainable by the most delicate known means, and yet the ultimate molecules possible to obtain, would consist of two atoms of hydrogen and one atom of oxygen. But by a chemical reaction those same molecules may be changed into another substance, the hydrogen atoms uniting to form molecules of hydrogen gas, and the oxygen atoms uniting to form molecules of oxygen gas. For a chemical reaction (or the union of the atoms of different molecules) it is requisite that the molecules come in contact; there must then be molecular energy; where a sufficient degree of this is lacking it may be stimulated by heat.

Combustion.—The atmosphere in which we live contains a certain proportion of oxygen. The ordinary process of combustion is simply this: By the application of heat the molecular energy of the combustible substance is stimulated to such a degree that the molecules are released or separated from the mass and are brought into contact with the molecules of the air, when the oxygen atoms of each, by a chemical reaction, unite to form oxygen gas.

But there are certain substances which have a large supply of oxygen stored up in them. Their molecules

then, may furnish oxygen to the combustible just as readily as the molecules of the atmosphere do, and in a more concentrated form. Hence, by placing the oxygen containing substances with the combustibles we may shut them in from the air, and by sufficiently stimulating their molecular energy, by the application of heat, produce combustion.

Gunpowder.—Niter or saltpeter is a substance rich in oxygen. Charcoal or carbon is a combustible. Now, if niter be brought into contact with charcoal and some sulphur be added to facilitate ignition, we have all the conditions necessary to combustion. This is the common black gunpowder. If, now, a certain quantity of this compound be confined, as in a gun, away from the air, and ignited, the result will be a combustion. The oxygen which is stored in the niter is so concentrated that it allows a very rapid combustion. This is termed an explosion.

Nitro-glycerine.—In place of the charcoal, another combustible substance, glycerine, may be employed, and instead of the niter, nitric-acid may be used to secure the requisite supply of oxygen. This is the compound known as nitro-glycerine. If a mass of nitro-glycerine be confined and ignited the result will also be an explosion.

Now, how shall we explain the tremendous difference of the two explosives? In each compound we have simply combined the conditions necessary to combustion, and the result in each case is simply the production, by a chemical reaction, of a large volume of gas and the consequent liberation of molecular energy in the gas. What is the difference?

Simply this: Whereas, in the gunpowder the union is of the atoms of different molecules; in the nitro-glycerine it is of atoms *within the same molecule*. Before the atoms of the gunpowder oxygen molecules and niter molecules can unite, they must each pass out from their molecules; in nitro-glycerine they are already in the same molecule.

Explosion of gunpowder.—Let us go back. Gunpowder is manufactured by mechanical processes. The charcoal, sulphur and niter are each ground into dust and then intimately mixed. But by no mechanical treatment can the molecules of the sulphur, niter and charcoal be changed into molecules of any other substance, and hence in the mass of gunpowder, which consists of grains, each individual grain is made up of countless molecules of sulphur, niter and carbon. The generation of gases can be produced only by the union of the atoms of one molecule with the atoms of other molecules, and the process of combustion beginning at one side of one molecule of one grain must extend first through this molecule to the next, and so on to the center of the grain, and through to the other side, then to and through the next grain, and so on through all the grains to the center of the mass and then through to the other side. The process is one requiring a certain definite interval of time. The generation of gas being progressive the pressure must also be cumulative.

Explosion of Nitro-glycerine.—Beginning with the manufacture, we find a radical difference between the mixture of the ingredients of gunpowder and the union of the ingredients of nitro-glycerine. The first was a *mechanical mixture*; the second is a *chemical reaction*. The atoms of the nitric-acid molecule unite with the atoms of the glycerine molecules and form new molecules, which are different substances from the old. Hence, nitro-glycerine is not nitric-acid and glycerine; it is nitro-glycerine.

Again, it has been demonstrated by chemical analysis that each molecule of this new substance, nitro-glycerine, contains, yraped up within itself, the different atoms, which, under the conditions of explosives, may combine with each other to form new molecules of gas. Hence, in an explosion of nitro-glycerine, it is not necessary for the atoms of one molecule to be set free from that molecule, and to pass out from it to the atoms of other molecules. The element of time is thus eliminated, and the process is instantaneous. The conditions which will explode one molecule of nitro-glycerine are sufficient to explode the millions of millions of molecules of the entire mass. The explosion of every part of the entire mass is then simultaneous. This is termed detonation.

The different exhibitions of force by slow and quick explosions are too familiar to need rehearsal here. Our study of the subject thus far enables us to understand the principles underlying these different effects.

The molecules of gas move in straight lines in all directions. Thus, when a solid or liquid substance is converted into gas, the pressure of the gas must be exerted in every direction at once. If an interval of time be allowed, this pressure concentrates itself in the line of least resistance. If no interval of time be allowed, it cannot so concentrate itself, but must be everywhere alike on every part of the surface of the containing body. The difference between the two explosions is just the difference between a push and a blow. The molecule of gas, in the one case, is like a leaden bullet thrown from the hand against a board and rebounding; in the other case it becomes the same leaden bullet driven with frightful velocity from the muzzle of a gun through the board.

In the discharge of a fire-arm, the pressure of the volume of gas generated by the slow form of explosion increases in force and exerts itself in every direction against the surfaces of the gun-chamber and the ball, until it attains a degree of strength sufficient to overcome the resistance of the ball. At that point the ball yields, and the pressure at once concentrates itself in the line of this yielding.

On the other hand, the generation of gas, in the explosion of a charge of nitro-glycerine in a gun-chamber, would be instantaneous throughout the whole charge. It would exert itself in every direction at once, and there would be no yielding of the least resistant body to admit of the pressure concentrating itself in the line of least resistance. For to yield requires motion; motion requires time; but there is no time; consequently, no motion. The ball, it is true, would be blown out of the gun, but not before every side of the chamber alike had received the same blow, by which also would the gun be shattered.*

II.

THE ORDERS OF EXPLOSIVES.

An explosive compound we have seen to be a mixture of substances capable of rapid conversion into gases by the operation of heat.

An explosion may be defined as "a chemical reaction causing the sudden or extremely rapid formation of a very great volume of highly expanded gas."

The effect of the explosion, we have also learned, depends upon the rapidly with which it is generated. Measured by this effect, explosives are now divided into two general orders, the first and the second—quick and slow, high and low. It will be more convenient for us to first consider

EXPLOSIVES OF THE SECOND ORDER.

1. In an explosive of the second order the explosion, or freeing of the gases, is brought about by simple ignition.
2. The process is gradual, from one side of the molecule through to the other, from one side of the grain through to the other, and from one side of the mass to the other.
3. This requires time.
4. Up to a certain point the explosive force grows more powerful as the explosion progresses; it is cumulative.
5. It concentrates itself in the line of the least resistance, and is never greater upon any other part of the containing body than upon the part which yields; *i. e.*, "it can never be greater than the resistance of the least resistant part."
6. Confined in a gun this class of explosives are projectile, or ballistic; they are therefore adapted for use in ordnance and fire-arms.
7. The distinctive type of this class is gunpowder.

EXPLOSIVES OF THE FIRST ORDER.

1. In an explosive of the first order the explosion, or freeing of the gases, is by detonation.
2. It is *en masse*.
3. It is instantaneous. A ton explodes just as quickly as an ounce.
4. It is not cumulative.
5. The force is exerted upon every part of the containing body alike.
6. It is shattering; and therefore explosives of the first order cannot be used in guns. The smallest charge would burst the gun.
7. The distinctive type of this class is nitro-glycerine.

III.

DETONATION.

Before going further we must consider more fully the mechanical nature of the form of explosion called detonation.

Detonation is the instantaneous conversion of the whole mass of a body into gas. Those who have studied it the most thoroughly, in theory and by experiment, as exhibited by the typical detonating explosive, nitro-glycerine and its compounds, have determined that:—

1. Three agencies combine to produce the action, namely, heat, pressure and motion, the last being either shock, jar or vibration. No one of these alone will produce detonation.
2. Heat alone will not produce detonation. A match will ignite unconfined nitro-glycerine, but the liquid ceases to burn when the heat of the match is removed. Nitro-glycerine may be burned with a wick the same as whale oil; a rag saturated with it burns slowly. Thrown upon the fire or upon a red-hot stove, it burns but does not explode.
3. Simple pressure alone will not produce detonation. This is shown by the fact that the liquid may be stored in such a shape that the pressure of the mass upon the layers next to the bottom must be immense, yet no explosion is caused thereby.
4. Motion (vibration or jar) does not produce detonation. When the nitro-glycerine is spread out on an an-

*For an elucidation of the foregoing subject the reader is referred to Prof. J. P. Cooke's "The New Chemistry" (Appleton & Co. \$2). This volume contains the most admirable epitome of the science of chemistry that we have ever seen. We have not hesitated to make use of Prof. Cooke's illustrations and in some cases of his language, and we here make a general acknowledgment to him.

vil and struck with a hammer, although the whole surface is jarred thereby, only that portion of it which is between the face of the hammer and the face of the anvil will explode.

5. Again, the pressure of a greater degree of any one of these three agencies admits of a less proportion of the other two. Thus the greater the degree of heat the less may be the pressure and jar; the greater the pressure the less the heat and jar; the greater the jar the less the heat and pressure.

Now let us consider the conditions of the detonation of nitro-glycerine and its compounds when confined, for instance, in a bore-hole. Just here we must keep in mind that confinement is not pressure, although it may be an aid to secure pressure.

6. If a mass of nitro-glycerine be closely confined in a bore-hole, and be simply ignited at one end, the expansion of the volume of gases formed by the combustion of a part of the charge, creates pressure upon the remainder of the mass, until, at a certain point, this pressure becomes powerful enough, in conjunction with the attendant heat and jar, to detonate the rest of the charge. This is a partial detonation of the charge. The action is best shown by an experiment with dynamite, which is a combination of nitro-glycerine with a solid substance: A charge of dynamite closely confined in a gas-pipe and simply ignited at one end, will burn through a certain length of the charge, and the rest will, by the pressure, heat and jar, be detonated. The interior of the tube thus burst will be marked so plainly by the two processes that it is possible to determine just where simple combustion ended and detonation began. It will be readily understood that the greater the pressure by the confining body the less ignition is necessary, and *vice versa*.

7. Again, when the confinement, and consequently the pressure, is less, the detonation may be produced by giving the charge a greater shock. This may be done by means of a strong percussion cap. In the present practice with high explosives the method of confinement and ignition is not employed; the approved mode is that of Nobel's invention, the use of a strong cap.

A clear understanding of these different conditions of detonation will enable us to intelligently study a third order of explosive compounds.

IV.

EXPLOSIVES OF A TWO-FOLD CONSTITUTION.

These partake of the nature of low explosives and also of the nature of high explosives; that is to say, according to the adjustment of the conditions of their explosion, they may be exploded either by ignition, gradually; or by detonation, *en masse*; or partially by ignition and partially by detonation. To this class belong the nitro-cellulose combinations; *i. e.* the combinations of nitric-acid and cellulose. Cellulose is the vegetable fiber of wood, cotton, etc.—the skeleton of vegetation.

The prominent type of this class of explosives is

GUN-COTTON.

1. Gun-cotton is the fiber of cotton treated with nitric-acid.

2. It is, as an explosive agent, analogous to gunpowder in that it is a porous solid; is when dry highly inflammable, and when ignited without confinement it burns like gunpowder by ignition.

3. It is, as an explosive, analogous to nitro-glycerine. It is made in essentially the same way, by a *chemical reaction*, the principal difference being that the nitro-cellulose, a porous solid, is not so sensitive as the nitro-glycerine, a solid.

4. *This is a difference of degree only, not of kind.*

5. *It is a difference which may be easily removed by mechanical means, i. e., by bringing the molecules of the mass into closer contact.*

6. This may be done by pressure.

7. Under pressure gun cotton is analogous to nitro-glycerine in its explosion. It detonates.

8. The explosion of gun-cotton ignited unconfined is analogous to that of gunpowder; confined, to that of nitro-glycerine.

It took a long time for men to learn this. The history of the use of the material is curious; for us it is also instructive.

First manufactured in 1833, it was, as its name implies, thought to be a suitable material to supply the place of black powder as a projectile explosive. It was employed in ordnance and in fire-arms. Sometimes it went all right. Sometimes it went all wrong; exploded with terrific power, burst the cannon, shattered the fire-arms, blew men's thumbs off. The manufacturers claimed that they could make it uniform. For all that we know to the contrary they sent for some of the cotton, contended that it must have been the manufacture of the old company, that it did not have the seal of the new company on the tops of the cans; and then—in due form, as in such cases made and provided—praised in the papers that their pressure gauge at Bigtown proved conclusively not only that this cotton was weaker than that of their own make, but also that the fault must have been wholly with the thumbs. But, at all events, the gun cotton burst the guns and blew off the thumbs.

After Nobel's invention of the method of detonating

nitro-glycerine with a strong cap, it occurred to Brown, an Englishman, that gun-cotton, being a nitrated product, like nitro-glycerine, might also be detonated. He tested it. It detonated. The gun-cotton accidents were explained to the full satisfaction of the scientific world—and, let us hope, also to that of the manufacturers. Gun-cotton is now employed for blasting purposes, and as detonating charges in bomb-shells and torpedoes. After the most elaborate series of experiments by the Austrian government, its use as a projectile agent was abandoned as unsafe. Gun-cotton's, therefore, no longer used as a projectile force in gunnery.

THE DETONATION OF GUN-COTTON.

1. The conditions of the detonation of gun cotton are analogous to the conditions of the detonation of nitro-glycerine. The three agencies of heat, pressure and motion must be present; and in proportion as any one of these is stronger the others may be weaker.

2. If the gun-cotton in a gun, for example, be not only confined, but also pressed down, so that it is compact, it will now be understood from what has already been said, a comparatively small amount of heat and jar, or shock, need be present.

3. If the gun-cotton be closely confined, but without pressure, and ignited at one end, the volume of the gas generated by the combustion of a part of the mass will supply the pressure, and, with the accompanying heat and motion, detonate the rest of the charge.

One of these two things is just what happened when the cannon and guns burst, and the thumbs were blown off.

Now, recapitulating and tabulating, for it is essential that this be clear in our minds, we have found that gun-cotton, an explosive, combining in itself the natures of both low and high explosives, may at any time in its explosion manifest the nature of one or the other, according as the adjustment of the conditions under which it explodes favor such manifestations:—

GUN-COTTON.

GUNPOWDER.	NITRO-GLYCERINE.
Second Order.	First Order.
Low.	High.
Slow.	Quick.
Ignition.	Detonation.
Grain to Grain.	En masse.
Cumulative.	Not Cumulative.
Projectile.	Shattering.

NOT EMPLOYED IN GUNNERY.

V.

"DITTMAR SPORTING POWDER."

Now, where does "Dittmar Sporting Powder," so-called, belong?

As an explosive agent it can properly be classed only in the order which we have described as possessing a two-fold constitution.

1. In so far as it is a nitro-cellulose product, it is strictly analogous in composition to gun-cotton. It is cellulose treated with nitric acid, or nitric and sulphuric acids. A chemist's analysis fails to discover any essential difference in the explosive properties of cotton-cellulose and wood-cellulose. The wood-cellulose—for palpable reasons—is cheaper than the cotton-cellulose. That is a difference which appeals only to the manufacturer's pocket.

Mr. Dittmar nitrates cellulose. He does more than this. He mixes his cellulose with starch and sugar and then nitrates the mixture. Therefore, depending altogether upon the care with which this mixture of the ingredients—cellulose, sugar and starch—is made, any given sample of "Dittmar Sporting Powder" may contain more or less of nitro-cellulose, nitro-starch and nitro-sugar.

Why does he add these higher explosives? We shall see that he does consider nitro-starch and nitro-sugar higher explosives than nitro-cellulose.

2. Like gun-cotton, "Dittmar Sporting Powder" is, as an explosive agent, analogous to gunpowder, in that it is a porous solid. Its mechanical manufacture—graining—makes it still more analogous in form. When dry and ignited in the open air, or without much confinement, it burns like gunpowder, by ignition.

3. Like gun-cotton, also, it is an explosive agent, analogous to nitro-glycerine in its manufacture. It is made in the same way, by a chemical reaction, the essential difference being that the nitro-cellulose, a solid, does not by its molecular construction form so sensitive a combination as does the nitro-glycerine, a liquid.

4. This is a difference of degree only, not of kind.

5. This difference may be easily removed by mechanical means, i. e., by bringing the molecules of the mass into closer contact and increasing their energy.

This may be done by pressure, and then

7. Under sufficient pressure "Dittmar Sporting Powder" is, in its explosion, analogous to nitro-glycerine.

8. Unconfined, it explodes by ignition; confined sufficiently, by detonation.

DITTMAR SPORTING POWDER.

GUNPOWDER.	NITRO-GLYCERINE.
Second Order.	First Order.
Low.	High.
Slow.	Quick.
Ignition.	Detonation.
Grain to Grain.	En masse.
Cumulative.	Not Cumulative.
Projectile.	Shattering.

NOT TO BE USED IN FIRE-ARMS.

That explains everything. That it does explain everything, and that without it many things are inexplicable, is a proof of its correctness.

We have now come to a point where we are ready to consider the action of the powder in the gun. This is just the point where Mr. Dittmar has always insisted that we must begin. Remembering that this action is precisely the action of gun-cotton, complete ignition, almost complete ignition and slight detonation, and so on to complete detonation, we think the intelligent reader will be able to account for almost any action of his "Dittmar Sporting Powder," even the "crazy fits."

Our task would now be completed were it not a moral certainty that, did we stop here, Mr. Carl Dittmar, or some of those interested with him, would flatly deny or evade the correctness of this classification of his powder. He has done this three times before.

We do not intend that he shall do it now.

We therefore prove it.

The proof is five-fold. First, the patent specification; second, the account of the process of manufacture caused to be printed by Mr. Dittmar; third, the report of a competent chemist; fourth, by inference from the "directions"; fifth, Mr. Dittmar's own sworn statements. Hereafter we shall add to these five, a sixth, namely, our own corroborative tests.

THE FIVE PROOFS.

First Proof—The Patent Specifications.

UNITED STATES PATENT OFFICE.

CARL DITTMAR, OF BOSTON, MASSACHUSETTS.

Improvement in Explosive Compound.

Specification forming part of Letters Patent No. 445,403, dated December 9, 1873; application filed August 30, 1873.

To all whom it may concern:—

Be it known that I, CARL DITTMAR, of Boston, Massachusetts, have invented a Preparation of Vegetable Fiber, in a new and distinguished manner, for the manufacture of Explosive Compounds, of which the following is a specification:—

I use vegetable fiber of any kind, raw or manufactured (as old linen or cotton rags, etc.), which I render to a fine pulp in the same manner as it is done in the manufacture of paper, with similar machinery, by open fire common steam or superheated steam and chemicals. The greatest care must be taken to render the fiber chemically pure by bleaching it and treating it with acids and alkalis, and outwashing those chemicals; after that I prepare this chemically pure pulp in different ways.

1. I press it in sheets of about one-sixteenth part of an inch in thickness. This thickness may be lessened or increased to suit the grains to the purposes to which the powder shall be used. These plates or sheets are first dried thoroughly, and then passed under a punching machine with punches the same diameter as the thickness of the sheets. The cylinders received in this manner I use for the best kind of powder. The remainder or whole sheets of the pulp pass through rollers, with cutters around the periphery—one pair of cutters cutting it in one direction, another pair cutting it across in a line at a right angle to the former, so as to give grains of a square form; or the pulp may be formed into grains by any other method. The grains I treat now with a mixture of nitric and sulphuric acid, in the same manner as it is done in the manufacture of gun-cotton.

[2. The same process except that the dried pulp is ground to the finest dust and treated as above.]

3. The pulp is soaked in a solution of sugar, or mannite, or inulin, or similar substances, pressed in sheets and cut as above, or formed into grains by any other method, or ground to dust after it has been dried, and then treated with the mixture of nitric and sulphuric acid, as above. The greatest care has to be taken then to wash the superfluous acid out again, which is more difficult than by the former two processes. After this has been done, it is soaked in a solution of soda, pressed out and then soaked in a solution of nitrate of potash, or chloride of potash, or similar substances, and then carefully dried. It is then ready for use; or it can be soaked after that for blasting purposes only with nitro-glycerine, etc. The combination of the vegetable fiber with sugar, etc., gives a very powerful explosive, and overcomes the difficulty in preparing the sugar, etc., alone with acids.

[4a. A combination with nitro-glycerine for blasting purposes only.]

[4b. Pulp pressed into cylindrical form, soaked in nitric-gum, for blasting purposes. 5. Pulp rolled up tight for drill hole cartridges.]

All the within-mentioned compounds, formed without the use of nitro-glycerine, can be used for the manufacture of fireworks, as being better adapted for these purposes than common powder in giving out neither smoke nor smell, and also for gunning or artillery purposes leaving no residuum and requiring no cleaning while in use.

The different explosive compounds manufactured in the different ways above described may be mixed together in different proportions, so as to give different strength, as may be required. The different compounds may be mixed with prepared or unprepared charcoal.

In preparing the vegetable fiber in the manner above described, I make a very powerful explosive, combined with the greatest safety, as the fineness to which the vegetable fiber is reduced by the destruction of the vegetable texture before the treatment with chemicals allows a more thorough action of the chemicals.

Every one of the above described compounds can be fired by means of a percussion cap, or like common powder, with a fuse, when well confined.

I claim as my invention:—

1. The herein-described process of treatment of vegetable fiber, the same consisting in reducing the fiber to a pulp, then compressing the pulp into a sheet or other compact form, and then reducing said sheet to a granulated or powdered condition, and treating the same in this condition with an acid or acids for the purpose of rendering it explosive, substantially as described.

2. Vegetable fiber prepared with a solution of sugar, mannite, or any other, or inulin, or other substances, substantially as herein described, and rendered explosive by nitric acid.

CARL DITTMAR.

Witnesses:
Albert Brown,
Edwin A. Brown.

PATENT FOR "PARCHMENTING."

The specification of patent No. 179,638, dated July 10th, 1876, is for the dipping of the pulp, mixed with sugar or not, after having reduced it to grains, or the compact form as already described, in a bath of sulphuric acid, and then subjecting it to a washing process, with water, to remove the acid. "In this way the pulp becomes like parchment, or has characteristics thereof. Next dry the material and subject it to a bath of nitric and sulphuric acids, as cotton is usually treated for being converted into what is termed 'gun-cotton.'"

By "parchmenting," as explained, the grains or masses of pulp before treating the same with the mixture of nitric and sulphuric acids, an explosive compound is produced with grains or masses that are very smooth and not adhesive to one another—much better in use than one made without the parchmenting process.

Second Proof—Description of the Manufacture.

In the FOREST AND STREAM of June 6th, 1878, Vol. X., page 18, is to be found a description of the process of manufacture as witnessed at Binghamton, N. Y., the previous Friday, by a then representative of this paper. The account was prepared with the direct verbal assistance of Mr. Dittmar, and the correctness of the description was never questioned by him after publication. It was as follows:—

Now as to the details of the process. The basis of the composition is cellulose. Cellulose is nothing more than pure wood fiber. Formerly Mr. Dittmar used paper as the base, but finds it more advantageous to purchase from paper manufacturers popular pulp. This pulp is taken and washed thoroughly, until it is nearly chemically pure. It is pressed, then dried, then ground into a uniformly fibrous form, all the lengths of fiber being destroyed. It is now mixed with sugar and starch, then again dried. Now it goes through what is called "the parchment process." When paper, under certain circumstances, is treated with sulphuric acid, it takes a peculiar dense form resembling parchment. The material is now again washed and dried, and served. It is now subjected to a mixture of sulphuric and nitric acids, again washed and dried, to be treated further with an alkaline base, sulphate being employed. Now, after again being cleaned and dried, the last process is to treat the grains of Dittmar powder with a coating of soluble glass. This last substance not only protects the powder from absorbing moisture, making it harder and denser, but diminishes very much any rapid explosiveness. A final very gradual drying completes this process. Of course there are a good many bits of practical work in the manufacture of the powder, in order to make it perfect, which depend on the chemical skill of the superintendent, Mr. Dittmar.

Mr. Dittmar at this time also explained to the visitors that not being chemists they could not fully understand the nature of the different processes.

Third Proof—A Chemist's Report.

A can of "Dittmar Sporting Powder," C brand, was received by us, sealed, Aug. 31st, and with other samples handed to Prof. Henry Morton, President of Stevens Institute. We gave it to Prof. Morton because we knew of no chemist who was more competent, or who stood higher than he in this special field, nor of anyone whose report would be more readily received as conclusive and sufficient. We simply asked from him, without explanation as to our purposes, a report upon the character and composition of the powder. Following is his reply:—

STEVENS INSTITUTE OF TECHNOLOGY,
HOBOKEN, N. J., Sept. 22d, 1880.

Editor Forest and Stream:—

At your request, having made some examination of various samples of Dittmar powder sent me by you in sealed packages, I now proceed, as you desire, to make a general explanation of the destructive character of this powder as compared with ordinary gunpowder, the nature of explosion as concerned in such substances, and other related matters inquired into by you.

In the first place, explosion in its general sense may here be defined as a rapid chemical combination resulting in the development of large volumes of gas and an intense degree of heat. The rapidity of the act of combination may vary within wide limits, and when it is extreme, as in the case of nitro-glycerine for example, it is generally called detonation.

Between bodies which explode like gunpowder, and those which detonate like nitro-glycerine, there is, as a rule, this characteristic distinction.

Gunpowder and like explosives are simply mechanical mixtures of the substances whose sudden combination constitutes the explosion. In the most thoroughly made gunpowder, anyone with a microscope could easily pick out the distinct particles of nitre, sulphur and charcoal, which constitute it, and whose combination is to produce its explosion.

A certain amount of time will therefore be needed for their union with each other in the act of explosion on account of their previous separation in space from each other.

In nitro-glycerine, gun-cotton and other detonating bodies, on the other hand, the ultimate molecules of the substance are united in the smallest possible form, and in each smallest molecule the most powerful microscope could present all the elements whose union is to constitute the explosion of the substance.

It is therefore evidently possible for these to unite with each other with far greater rapidity on account of their preëxistent nearness, and thus to produce a vastly more rapid, or sudden explosion, or detonation.

It is true that in both classes of bodies other conditions may very largely modify these tendencies.

Thus nitro-glycerine may be made to burn like kerosene if ignited in an open vessel, and gunpowder, if tightly inclosed and fired by a violent fulminating fuse, may be made to detonate in some sense; but nevertheless these distinctions exist and have a marked influence on the character of the two classes of explosives.

From this it follows, for example, that gunpowder, when made in the best manner, has its highest explosive power, which can only be increased by such extraordinary conditions of solid inclosure, or violent fulminating ignition, as could never be present in its use with a rifle or shot gun.

Moreover, any fault in its manufacture could only diminish its efficiency by inadequate proportion of parts, or incompleteness of mixing, and could by no possibility raise it into the rank of a detonating explosive.

With a detonating explosive, on the other hand, there will be a vast range of possible violence in the explosion of the very same material, depending upon its degree of compactness and the na-

ture of the means of firing, even within the limits of such variations as might occur in the use of an ordinary fowling gun.

We thus see that with the second class of explosives there is an element of uncertainty and possible risk, resulting from their constitution.

Considering, now, the Dittmar Powder in this connection, I find it to consist essentially of two varieties of nitro-cellulose, one being the nona-nitro-cellulose, essentially identical with ordinary explosive gun-cotton, and the other the hepta and octo-nitro-cellulose, essentially identical with the so-called "negative cotton," used to make collodion for photographers. There are also present some portions of other varieties of nitro-compounds, in some cases, as nitro-starch, nitro-sugar, etc., but these do not essentially effect the general character of the material.

It also contains a portion of nitro. Its mode of manufacture is essentially that used in the preparation of the ordinary gun-cotton.

From this it will appear that it belongs to both the above-named classes of explosives, or rather possesses many of the characteristics of both. In so far as it is a mixture of two nitro-celluloses and nitro, it tends to explode with moderate rapidity when properly ignited; and inasmuch as it contains a large amount of nona-nitro-cellulose it is liable under certain conditions to undergo a detonative explosion.

The problem of manufacturing gun-cotton of uniform quality, and not liable to change by keeping, and of the use of the same in gunnery, has engaged the attention of Baron

von Liebig, and Prof. Abell, in England, as well known, for more than a dozen years, and yet, as a practical outcome, I believe that except for destructive explosions, such as in mines, shells and torpedoes, it is not to-day even recommended.

This indicates that extraordinary difficulties have been encountered and that great care is required in its manufacture.

In the Dittmar powder we have, in the first place, a mixture of two kinds of nitro-cellulose, one of which is identical with explosive gun-cotton, and this, if used alone, would be evidently open to all the objections which have restricted the use of ordinary gun-cotton, but the process of manufacture is so conducted as to produce not only this highly explosive nitro-cellulose, but also a portion of the non-explosive variety. This will, of course, dilute or restrain the violence of the other, but as it would also by itself fail to burn up entirely, some nitro is added to supply the needed oxygen. This is essentially the theory of its action. Now, of course, if it is difficult to make with certainty a definite nitro-cellulose like ordinary gun-cotton, it must be yet more difficult to produce a definite mixture of two or more varieties of nitro-cellulose which shall be uniform in successive batches, and hence the greatest care is required, and each lot should be carefully tested and other precautions taken to secure this end.

That a powder safe under all ordinary conditions can be and is not made in this way, I by no means intend to deny; but only to point out the fact that the burden of proof lies on the side of those who maintain the affirmative, since the "a priori" considerations lean the other way.

In comparison with ordinary gunpowder this consideration is worthy of attention. In ordinary powder no accident in manufacture or subsequent change can make it more explosive than it is intended to be, while in any such material as the Dittmar powder it is quite possible that in its first production it should be made much more violently explosive than is intended, and by keeping it might undergo a change tending to increase its sensibility or cause a spontaneous explosion. The latter, I admit, is not probable, but yet has occurred in the case of gunpowder on many occasions.

In conclusion, I would say that where there was an advantage in the use of such a powder as the Dittmar, warranting the acceptance of a little risk, its use would be judicious, but that abundant evidence of its safety should be adduced before we could fairly regard it as involving no more risk than the ordinary gunpowder.

HENRY MORTON.

Fourth Proof.—Inference from the Directions.

We shall permit the reader to draw his own inferences from these sentences from the directions. The italics and capitals are not ours, but theirs, and the directions are those which came to us with a can of sealed powder from the Dittmar Powder Manufacturing Company (No. 2), Sept. 1st, 1880:—

"DIRECTIONS FOR LOADING DITTMAR POWDER.

"BREECH-LOADING SHOT GUNS.—Grain: B (course) C (fine):—
"Use half in weight of black powder, or the same quantity by measure. Tap the powder measure a few times to pack and settle the powder down evenly. Put on 3 pink or black edge wads, for paper shells one size larger than bore, and for metallic shells two sizes larger, and ram the shells down with either hand or light mallet. If not confined by large wads and well rammed, the powder acts too slow. The more it is pressed and confined by wads, the stronger the results will be, and recoil and report increase correspondingly. If pounded too hard it will produce wild shots.

"MUZZLE-LOADING SHOT GUNS.—Grains: FFF (very fine):—
"Use same quantity by measure as black powder. Put on a couple of large pink or black edge wads, or some large pasteboard wads, and ram the same well down. If paper wadding be used, take some more than is used for black powder and ram down hard. The head of round shot should be rammed and fit the bore as near as possible, to be able to put the wads down evenly and solidly. Load the shot as usual. Use only FFF for muzzle-loading.

"BREECH-LOADING RIFLES.—Grain: F (medium):—
"In loading rifle-shells, care must be taken that each charge is evenly packed, which can easily be done by tapping the powder measure alike at each load. Use precisely the same measure, or 1/4 lb in weight of black powder. Use as large and tight-fitting bullets as possible. Should your bullets not fit tightly, or the shell expand too much after shooting, so that the bullet goes in loosely, use a large wad or several thin wads, but always so that the powder is not pressed so hard that it will be shaken and settled down. If pressed, the powder will not work accurately, as it needs confinement, BUT NOT PRESSURE, in breech-loading rifles.

"NOTICE! All Canisters are sealed, and only warranted when the seal is unbroken."

Is that "Notice!" simply ridiculous, or, in view of what we have now learned, is it not significant as well?

Fifth Proof.—Mr. Carl Dittmar's Own Sworn Statements.

We shall now show from his own statements, made

* In these terms mean that in several cases nine, eight and seven molecules of nitryle, the base of nitric acid, are combined with one cellulose base.

under oath, not only the fact that the so-called "Dittmar Sporting Powder" is, as we have said, analogous to gun-cotton and nitro-glycerine, but also the fact that Mr. Dittmar was, and is, fully informed of the true and exceedingly dangerous character of his powder.

If we may credit his declaration, Mr. Dittmar has been engaged in the manufacture of explosive compounds almost twenty years.

CIRCUIT COURT OF THE UNITED STATES.—New York, Feb. 11th, 1880.—Before John A. Shields, United States Commissioner for the Southern District of New York. Deposition of Carl Dittmar, who, being first duly sworn, deposes and states, in reply to Direct Question 13, And from where [the army] where?

Answer. From there I went to Spandau, and became technical director of the Royal Prussian Powder Manufactory.

Q. 14. In what year was that?

A. 1861.

Q. 15. State at large what species of powder you were there occupied in making.

A. It was the common gunpowder. Besides that, I had charge of the gun-cotton manufacture.

Q. 16. What was the method of preparing gun-cotton at that time by you?

A. That was purified cotton immersed in a bath of nitric and sulphuric acids.

Q. 17. I started there till about 1862. A. 23. Then I became a director of the alum works in Harburg.

Q. 18. State your occupation there in respect to explosive powders, or any experiments you may have made at that time in respect thereto.

A. I manufactured powder made out of sawdust and acids.

Q. 19. State your preparations and methods of manufacture.

A. That was in the same way that gun-cotton was made, only I used sawdust instead of cotton.

Q. 20. I cleaned the sawdust—purified it. A. 33. I treated it with diluted acids and alkalis to get the impurities out.

Q. 21. Then subjected it to what?

A. To a bath of the mixed acids.

Q. 22. In the same manner as gun-cotton?

A. In the same manner as gun-cotton.

But this was powder alleged to have been made by him in Europe. The testimony is introduced here only to show that Mr. Dittmar claims to have been long engaged in his work; and also to show that according to his own testimony he has been working at the manufacture long enough to have made his nitro-cellulose product uniform, if it could be made uniform.

Mr. Dittmar thinks that he knows more about the subject of high explosives than anyone else. In the same deposition we find this:—

Cross Q. 97. Do you consider yourself an expert as to the characteristics, manufacture and use of high explosives?

A. Yes, sir, I consider myself an expert. I think I know more than anyone else about high explosives. My knowledge in high explosives was known by the Prussian Government and foreign governments, and I had offers from the Turkish and Roumanian governments as early as 1863. I have made the best examinations in chemistry that ever have been made in the Royal Prussian Artillery and Engineer School. I have manufactured high explosives since about the year 1861, and have continued and invented a great many powders up to the latest date.

Coming now to the "sporting powder" made by him in this country, he says, same deposition, Feb. 19th:—

Cross Q. 789. What is Titan powder?

A. I made different kinds of Titan powder; some was my sported powder, which is composed of, or at that time was composed of, cellulose, sugar and starch, treated with acids, and this compound was mixed with nitro-glycerine.

And the following day, in the same deposition, in answer to Cross Q. 1,338, he says:—

Sometimes I made a nitro-glycerine powder that was nitro-glycerine mixed with my sporting powder. That powder is not the common black powder; it is [Feb. 20th, 1880.] one of my inventions, consisting of cellulose, starch and sugar treated with acids.

Cross Q. 897. Is nitro-cellulose, made as directed in the dualin patent, itself an explosive?

A. Yes.

Cross Q. 898. Is it strictly analogous to gun-cotton?

A. Nitro-cellulose described in process No. 2 is analogous to gun-cotton before it is mixed with nitro-glycerine.

So much to show that Mr. Dittmar himself, on his oath, declares that his sporting powder is (Feb. 20th, 1880) made as we have said it is made, and that he knows it to be analogous to gun-cotton, as we have said it is. Let us now see how he confirms us in regard to our statement of his views of the relative explosive power of nitro-cellulose, nitro-starch and nitro-sugar, etc.—

Re-direct Q. 1412. What is nitro-cellulose as to its explosive qualities?

A. It is a compound worked in the same way as nitro-glycerine. It is detonated by a percussion cap. It is not necessary to use a percussion cap.

Re-direct Q. 1413. But in the use of the percussion cap?

A. It will detonate* the same as nitro-glycerine.

CIRCUIT COURT OF THE UNITED STATES, DISTRICT OF CALIFORNIA, IN EQUITY.—Before N. Austin Parks, Notary Public and Special Examiner, Boston, Dec. 10th, 1874. Deposition of Carl Dittmar, who having been duly sworn, doth depose and say as follows, in answer to

Direct Q. 134. You mention in your cross-examination gun-cotton: are or are not nitro-compounds, such as nitro-manite, nitro-sugar and dextrine and gum treated with nitric acid, as well as gun-cotton, in their nature similar to nitro-glycerine? Will they, as a rule, explode by the same means and under the same conditions as nitro-glycerine?

A. They are, and will so explode.

Cross Q. 550. What is detonation?

A. Detonation as now generally understood with reference to blasting materials is substantially the instantaneous and simultaneous decomposition of the explosive.

Cross Q. 550. How is it produced?

A. By a shock, a strong percussion cap or striking on an anvil; also by setting the high explosive on fire under strong and close confinement.

* Mr. Dittmar understands what detonation means. Deposition Feb. 18th, 1880.

Direct Q. 135. Is the explosion of these substances produced substantially the same way as the explosion of nitro-glycerine?

A. Yes.

DEPOSITION BEFORE SHIELDS.

Re-cross Q. 1,610. (repetition of Re-cross Q. 1,610). Is not the explosion of pure nitro-glycerine much quicker than the explosion of ordinary nitrated compounds?

A. No; it is not. I think some nitrated compounds are still quicker than nitro-glycerine.

Re-cross Q. 1,645. Do you mean by quicker, more easy to explode, or more quick in explosion when made to explode?

A. More quick in explosion, and easier, so far as they would explode by both means, fuse and cap.

Re-cross Q. 1,646. In what respect, according to your theory, are nitrated compounds more quick in their explosion than nitro-glycerine?

A. They have a quicker detonation and a quicker decomposition in the elements.

A. To Re-cross Q. 1,686. For instance, I consider nitrate-sugar* a quicker explosive than nitro-glycerine.

A. To Re-cross 1,687. Nitro-nitrate exploded by means of a strong percussion cap may be just as quick as nitro-glycerine; I consider that the slowest; it may be just the same; it may be no much different; the nitro-cellulose may be slower, but it would not be much; it would be nearly the same, because I consider nitrate sugar quicker.

Re-direct Q. 1,715. You have stated that nitrate sugar was quicker than nitro-glycerine. Is nitrate starch quicker than nitro-glycerine?

A. I am not so sure as to nitrate starch.

Re-direct Q. 1,716. If not quicker, is it of the same quickness?

A. About the same.

Re-direct Q. 1,717. Is the nitrate starch mentioned in your dualin patent, of the same quickness of explosion as nitro-glycerine?

A. It is either quicker, or just the same.

A. To Cross Q. 2,393. It [the strength of the blasting powder] does not depend on the nitro-glycerine; but I can make it just as strong, if I introduce more or less of the nitro-cellulose, or nitro-starch, which are about as strong as nitro-glycerine itself if exploded with a strong cap.

Mr. Dittmar may stickle on the dualin patent starch, sugar and cellulose; but how will he stickle on this?

UNITED STATES CIRCUIT COURT.

New York, Feb. 19th, 1880.—Before John A. Shields, United States Commissioner Southern District of New York.

Deposition of Carl Dittmar, of Binghamton, N. Y., who, being first duly sworn, deposes and states, in answer to Cross Question 836:—

"My gunpowder, when I first made it, had the same tendency as nitro-glycerine powder. It burst most all the guns at first, when I began to introduce it. It was JUST THE SAME as if I WOULD USE NITRO-GLYCERINE POWDER. I have it now so that it is tamed down, and don't burst any more guns."

We hardly think that Mr. Carl Dittmar, or the Dittmar Powder Manufacturing Company (No. 2), will try to dodge that.

There it is bare and bald. Comment could not make it mean more than it says. It says all.

Mr. Dittmar thinks that he can write the English language better than he can speak it. We will compare some of his written language with this verbal declaration.

CARL DITTMAR SAYS.

Writing to Sportsmen.

"I pledge my word of honor that I have never sent, and never will send, powder for sporting purposes which should have the slightest trace of nitro-glycerine in its composition."—Letter in ROD AND GUN, Aug. 14th, 1875, Vol. VI, page 289.

"If some gentlemen have damaged their runs it would only be by negligence, and by not following my directions. It is absolutely impossible to damage a gun, wad or strong, breach or muzzle-loading, if my powder is used according to my instructions."—Letter in ROD AND GUN, Aug. 7th, 1875, Vol. VI, No. 18.

"When I first commenced making this new powder I had no more experience than your own. I had not had a single accident, although I have fired more than twenty thousand times in various kinds of guns."—Letter same as below.

"In conclusion I would say that sportsmen and riflemen are and have been experimenting with my new powder all over the country, and the testimonials thus far received are in the highest degree satisfactory."—Letter in FOREST AND STREAM, June 21st, 1875, Vol. IV, page 315.

Mr. Dittmar's written statements, already quoted in the first part of this article, are also interesting reading just here. Next week we shall publish a further exhibit of like affirmations, when we come to show how Mr. Dittmar evaded the charge that his powder might detonate.

This will be of the past. A word as to the present. The "Dittmar Sporting Powder" was never a fit material to put into the hands of sportsmen ignorant of its true nature. It is not now. It never will be. The manufacturers of it may "tame it down" for a century. We believe that they cannot make it, according to the patent specifications, so that when used in a gun it will give uniform results. To remove from it the ever-present potentiality of working disaster, maiming and death, they must abolish the laws of nature, and remove from the universe the molecule and the atom.

The Dittmar Powder Manufacturing Company (No. 2) cannot change the laws of nature.

* Nitrate sugar is only another expression for nitro-sugar.

The FOREST AND STREAM dislikes personalities; it never drops to calling names. But when the truth is to be spoken, that responsibility may be fixed, it will never fear to speak the truth.

If in the course of this article we have at times failed to separate the question of the safety of the powder from the course pursued by its manufacturers, it is because we have been reluctantly compelled to do so. From the very nature of the case the two are so connected that a discussion of the one could not avoid a reference to the other.

THE CREEDMOOR MEETING.

THE extended report which we offer of the work done and the results accomplished at the recent Fall Prize Meeting at Creedmoor, warrant careful scrutiny. These long lines of figures are not mere accidental arrangement of digits, but represent careful, intelligent application of the accomplishment of a result. The "Woodchuck Hunters," as they were jocularly called, who took the State Prize, did not blunder into it, but reached that honor by persistent endeavor on their home range. At that place they became accustomed to baffling winds and disadvantageous conditions. They became trained in the judgment of wind and its effect on the flying bullet; they gained the knack of steady holding, and then when they found a bad day at Creedmoor, they were in a measure at home, of course. There may have been other teams who were the victims of bad luck. The most skillful shot may miss, but the novice does not roll up a fine total. *Faluna non sine pulvere* is the rule of the range, from which there is no escape. Every prize winner of last week earned his trophy and its honor by hard work. Not one of them blundered into his good fortune, and those who failed of their ambition have at least the satisfaction of knowing that their leaders did not win by a fluke; that they have not been compelled to take a place behind "duffers." The popularity of off-hand shooting is indicated by the large number of entries in the short range matches, and this will probably continue to be the case so long as marksmen do not care to unite acrobatics with their target practice and reach the bullseye only through a fine grape-vine twist of the arms and legs over the green sward. The success of the regulars, while it should be looked for as a matter of course, is none the less an agreeable surprise. The army has taken a very sensible view of its position in the matter of rifle practice. There is no doubt that when the movement for an intelligent drill in target shooting was begun by the militia of the States, and of New York in particular, that the regulars were lamentably behind-hand. By a sort of general neglect the Springfield rifles in the hands of the troops were allowed to have a very quiet time of it, except when they were aimed so wildly and with so little effect against the Indian malcontents on our frontier. When rifle practice had become pretty well established among the volunteers, the deficiency of the regulars became so apparent that something had to be done. Then it was that the officers of the regular army came out frankly and acknowledged that their men were far in the rear, and joining hands with the militia the result has been of great advantage to both. Friction has developed effort, and the keen rivalry has spurred on the soldier and citizen alike to their best endeavors. Personally there is little choice between the make-up of the teams, but the failure of New York State to appear in the International team match opens up a fruitful topic of official negligence, and is a strong confession by men competent to make it, that New York State is armed officially with an antiquated arm, and the name of "gas-pipe," with which it has been dubbed by the men carrying it, is a singularly expressive one. The result of the Wimbledon Cup match may rouse the cry of professionalism, but there was room enough and to spare above it, which the non-professional might have occupied, there does not seem to be so much room for complaint. On the whole the meeting was a success, though it does seem that after so many years' experience a more clock-work movement of the competitions should have been reached. As it is, the experience gained on many points at one meeting seems to have entirely evaporated ere the date of the next gathering.

THE TILESTON FUND.

[NEW YORK, Sept. 18th.]

Editor Forest and Stream:

I have to acknowledge the receipt to date of further subscriptions to the "Tileston Memorial Fund," as follows:

Previously acknowledged.....	\$290 00
Edwin Smith.....	50 00
W. L. Foree, Jr., E. P. Thorne, Jr., J. Van Hook, Jr., Wm. E. Jones, Jr., Percy C. Olin, through P. C. Olin.....	18 00
H. W. Livingstone.....	50 00
C. W. Hutchinson, through Forest and Stream.....	10 00
W. A. Coster.....	5 00
Total.....	\$768 00

FRED. N. HALL, Secretary.

THE INTERNATIONAL CRICKET MATCH.—We publish this week the most full and comprehensive report of the United States-Canada Match, at Philadelphia, that has appeared in the public prints. It is from the pen of our cricket editor, who witnessed every ball bowled in the match, and every phase of the game has been faithfully detailed. Our going to press at an early hour last week prevented its appearance in last issue.

Natural History.

BEAVERS PARTIALLY DOMESTICATED.

THE interesting note from E. B. B., which we published last week on beavers in Iowa, makes the accompanying extract particularly interesting just at present. The beavers referred to were introduced into the Isle of Bute, by the Marquis of that Isle in 1874, and seem to have done very well. The succeeding remarks are taken from the *Journal of Forestry*, and are from the pen of Joseph Stuart Black, keeper on the Bute estate:—

Their food in winter consists wholly of the barks of trees; had they a choice I have no hesitation in saying they would prefer the willow and poplar. These not growing in the enclosure they had just to adapt themselves to circumstances, and take a share of what trees they could get, consisting of oak, plane tree, elm, thorn, hazel, Scotch fir, and larch. Of the hard wood, they seem to prefer elm to plane tree, then oak, of which they eat sparingly. Of the first, the Scotch has the preference; as for the larch, they did not touch it till early in 1878, since which time they have taken to it very well. As for the alder and spruce fir, they eat almost nothing of them. Along with all these we have always given them a supply of willow. In summer they eat freely of the common bracken, likewise grass, and young shoots of every description growing in the place. In autumn they grub up and feed upon roots, chief among which is the Tormentil (*Potentilla tormentilla*), known to Scotch people as "tormentil root," and the young tender shoots of the common spurs before they appear above ground, at the same time cutting down a tree now and again and feeding on the bark.

As to the tree felling it is all done at night; the number which they have cut have amounted now to 187 trees from five feet in circumference downward. These are all forest trees, besides many smaller bushes. Before cutting down a tree, they mark it all round at the height they wish to cut it. They begin to cut at the opposite side to which they intend the tree should fall, invariably making it fall with the top to the water. Where they grow near enough, they make them fall across the stream or dam, cutting many to suppose that they are so placed to form a bridge, whereby they may cross from one side of the water to another. They do not require a bridge, they can swim, and rather than cross over a prostrate tree they dive under it. My impression is, they are so placed to break the current of the water when the stream is flooded; also if convenient they take advantage of building a dam where some of the trees lie across the water. Those lying across in their principal dam are utilised in storing up their water food, these stores being built on the upper side of the trees, so that they cannot be swept away with the winter floods.

When cutting the trees they use their teeth, on the same principle that a forester does an axe, always keeping plenty of open space, so that they can cut past the centre of the tree on one side before beginning on the other. It is in the latter end of autumn they commence to cut down trees for winter food. Having cut them down, they speedily strip off the branches, cutting them into lengths to suit their strength for dragging them away to the dam, where they store them in different places near their house, so that they may have sufficient food although the dam may be frozen over, or the ground covered with snow. What is left of the trunks of the trees that they cannot drag away, they feed on at leisure, eating the bark.

Besides the work above ground, which I tried to describe, they have done a great amount of underground work, such as cutting channels in their dams, and making burrows. These burrows they make by cutting a road from the middle of the dam for several yards into the dry ground, where they scoop out a dome-shaped burrow from eight to ten inches above the level of the road, then cut a hole through the surface and cover it over with sticks and grass so as to act as a ventilator. Here they live and feed in security and contentment. Some of the roads to these burrows, are from fifteen to twenty yards long, and so level that the water follows them in the whole length.

As to the time they bring forth their young, from my own knowledge I cannot say. I have seen it stated to be January, and also the beginning of May. I can say nothing against that, judging from the size of the young when I first saw them in the second week of June, the oldest litter being about the size of a full-grown rabbit, and the youngest not half that size.

From careful observation I have good reasons for believing that they have only one at a birth. One thing I am certain of: they have two litters in the season. Beavers are a class of animals that are very timid, their sight, scent, and hearing very keen, so much so that it is a great caution they can be approached near enough to see that they are doing their work. They are under cover all day from seven o'clock in the morning till seven in the evening. When one comes out, it floats on the surface of the water, carefully surveying the whole scene around, sniffing the air, and if no danger is apprehended it dives and disappears. In two or three minutes a number of the colony begin to appear and disperse themselves, some to swim and sport about in the dam, while others go in quest of food. If one of them spies a danger it strikes upon its long stroke on the water with its tail, when all of them that are out, come tumbling into the dam and disappear.

I have seen them wrestle in playfulness and fight in anger, and also when the mother was feeding and the young one sporting about in the dam, I have seen it go and begin to tease her, when, if she did not wish to be troubled with it, she would strike and scold it, and pitch it from her in the dam. They will allow of no business with any member of the colony; if any such there be, they are beaten and driven out to live as best they may. These so driven out generally roam about, making a burrow here and there, where they live for a few months, and die.

ON THE GEOGRAPHICAL DISTRIBUTION OF SHELLS.—A correspondent, N., who writes from North Vernon, Ind., sent us an interesting though brief account of a goose

which was caught by a fresh water mussel (*Unio*). Similar instances have before been noted, both in FOREST AND STREAM and elsewhere, and are always interesting, because they show so plainly the method by which shells of one kind or another may be transported for long distances over the land, and may thus be introduced to waters far from their real homes and which they could scarcely reach in any other manner. This point was first brought out by Dr. C. Darwin and afterwards elaborated by Alfred Russell Wallace in his magnificent work on the Geographical Distribution of Animals. Our correspondent's note is as follows:—

Some weeks ago, in company with others, I saw a goose limping along more clumsily than is usual, and on examination found that her foot had been caught in the shell of a live mussel. She was relieved, but at the expense of a toe.

METROPOLITAN BLACKBIRDS.—Many years ago the crow blackbirds (*Quiscalus versicolor*) roosted in the White River bottom, a few miles below our city. Their feeding ground was north of Indianapolis, so that morning and evening there was an immense flight of these noisy fellows. They finally began to be familiar with the noise and bustle of city life, and would nest in our shade trees. Then they became more bold and began roosting in the lawns of Calvin Fletcher and Judge A. Le Ronch. Their next move was to take possession of the shade trees on North Pennsylvania and Meridian streets.

Suppose the cause of these birds deserting their former roosting place in the lowlands along the river, and coming to the city shade trees is the fear of owls and "vannits."

Four years ago I noticed among the blackbirds roosting in front of my house several cow buntlers or cow pen birds (*Jeleus pecorior*). The next year the latter came in distinct flocks, and have remained separate each year since. This year there are not less than ten thousand occupying the soft maples in front of my yard. They arrive from their feeding grounds before sundown, and after a short rest in the trees surrounding my fountain, they descend and drink. Sometimes they catch the small fish in the fountain, but I have not seen them generally go to the ground at once and surround the fountain, some flying onto the "rockery," and drink in flocks of hundreds.

Should the evening gun, at the arsenal, be discharged while they are thus engaged, every bird is silenced, and at once flies to the tree-tops. The arsenal is over a mile and a half distant.

These little fellows have become quite tame, so that now the carriages and foot passengers do not disturb them. They even fearlessly drink while my children are playing within a few feet of them.

In the morning they fly from the maples into my fruit trees, and there "plume" themselves ere they go to their feeding grounds among the herds of milch cows west and north of the city.

During the night these birds keep up a chirping sound. Should a band of music pass along, they send a great disturbance and fly from their roost, keeping on the wing in circles above the trees until the noise has ceased.

As to other interesting characteristics of this bunting, I refer your readers to Audubon and Wilson.

Indianapolis, Ind., Sept. 14th.

SNAKES EATING FISH.—Near Bloomfield, Pa., Aug. 17th, I have noticed several communications, pro and con, on the question of snakes eating fish. I think I can be able to throw a little light on this important question.

Several Sundays ago, as two of Bloomfield's most reliable as well as handsome, young men were leaning over the railing of a bridge thrown across a small run below town, they noticed a commotion in the water, and their attention was attracted to the struggles of a large "sucker," at least five inches in length, that was held in the jaws of a water-snake. The fish was too large to be easily quieted by his snakeship and did not take kindly to the proceedings. At every leap on the part of the fish the snake would be drawn out and held, but it would manage to keep its hold and was patiently waiting until the strength of the fish would be exhausted, when it would have made off with its prey. But at this juncture the young gentlemen interposed for the weaker contestant, and the fish was liberated from the hungry jaws of the reptile. May not the snakes have more to do with the depopulation of our streams than the pot-fishermen? The smaller streams are generally polluted with water snakes—the species to which the one I refer to belonged.

WAYNE.

A QUESTION ABOUT QUAIL.—Wawayanda, Sept. 5th.—Editor Forest and Stream.—Thinking the following worthy of note, I take the liberty of sending it to you. A quail's nest containing thirty-six eggs was found on a gentleman's farm at Warwick, N. Y., all of which hatched but one. What is the largest number ever found in one nest? The old female had a narrow escape during her incubation, from a scoundrel out shooting. Having flushed her from the nest, he levelled his gun at her and was just pressing the trigger when the farmer saw him and drove him away. This, I should say, was pot hunting extraordinary.

WALLKILL.

ANOTHER CAPTIVE COCK.—Newark Lodge, Guyard, Orange County, Sept. 10th.—Editor Forest and Stream.—Having noticed the interest taken by you in woodcock in captivity, I think it may interest my brother sportsmen to know that I also have had one in my possession for a fortnight. My keeper went out a few weeks ago, and crossing a field where corn was being cut, saw that a man had just caught a healthy and lively cock in a bunch of corn. The captor presented him to me, who feeds him according to your rules, and the bird is doing well. Can you tell me what I can do in the winter with Mr. Timberdoodle? Now worms are plenty, but in winter I wouldn't know what to feed him.

A. E. GODEFFROY.

Probably the best way would be to store up a lot of worms for him. A barrel partially filled with earth and placed where it would not freeze, would hold worms enough to last even a woodcock through the winter.

Fish Culture.

SALMON OF THE PACIFIC COAST—HOW THE SHAD HAVE MIGRATED.

ASTORIA, Oregon, July 10th.

SOME time ago, a year or more, a communication appeared in Forest and Stream, from a flock of fly fishermen for salmon in the Columbia River. The writer, C. C. R. (Capt. Rockwell, United States Coast Survey), asserted that the reason the salmon did not take the fly during the spring and summer months was that owing to the discolored condition of the water during the spring and summer freshets it was impossible for the fly or spoon to be seen. The reason was quite plausible, and, in the presence of a better, would have been accepted as conclusive. At the time of reading the article referred to, I had been fishing for salmon with trolling spoons for two years, and I had observed that whenever a salmon was hooked, it had always been below the line of fresh water. In the fall, when the freshet has subsided and the water is low and clear and the tides are high, the salt water reaches a point abreast of the city front; and that is the highest point at which a salmon has ever been taken with a hook and line. One day last fall, to test the matter fully, I rowed to Tongue Point, four miles above the city, where the water is fresh, and, though the fish were leaping all around me, I could not get a bite; the tide dipping on the ebb, I rowed four miles below the city. To test the matter more fully, during the present season I have trolled for them nearly every week on the upper tide waters of the Klaskan and Young's rivers, at a point beyond where the muddy water of the Columbia reaches, and though I have seen them leaping many times I have not yet succeeded in getting a rise. The truth seems to be that the spring and fall salmon, which, by the way, are two names for the same species, like the other *Oncorhynchus*, is a fish that runs exclusively in salt water, and takes a bait, fly, or spoon only on its feeding grounds; that is, in salt water only.

While writing of salmon, I wish to take exception to some of the statements of "Movitch" in his article on Frazier River fish. He says, "I believe salmon return to the river of their nativity . . . to spawn. Each river has its own kind of salmon. These are peculiar to itself alone. *Salmo gairdneri* has never been seen in Frazier, nor a 'suckeye' in the Columbia," etc. I am willing to admit the general truth of the first of these statements; the other I believe to be erroneous. It is true, that the opinions of "Movitch" have been long held by Sacramento and Columbia canners, and they have generally been accompanied by the assertion that the salmon of the northern rivers were not only a different, but that they were an inferior fish; and this assertion is true to a certain extent, as will appear presently. But the opinion is now held by some of the best observers that every member of the salmon family found in any river, from the Sacramento to the Yukon, in Alaska, will be found to a greater or less extent in all the rivers of considerable size. The spring salmon of the Columbia (*Oncorhynchus gairdneri*) is known to be identical with the spring salmon of the Sacramento, and constitutes the bulk of the season's "run" in both, though in the Columbia they average a little larger and are just a trifle faster. The spring salmon of the Frazier is the same fish, but considerably less in size and fatness. The *Oncorhynchus nerka*, the "suckeye" of the Frazier, the "blue-back" of the Columbia, and, changed in color by proximity to the spawning season, the "red" of the Idaho lakes, constitute the bulk of the "run" in Frazier, but is much less abundant in the other streams.

As a canning fish it is inferior to the quinnat; so much so that canners here, having regard to the reputation of their brands, refuse to use them at all. As a fresh or salted fish they are nearly, if not quite equal, to the quinnat. The *Salmo nigricus*, "steelhead" of the Columbia and Sacramento, and "trout" and "salmon trout" of Frazier, is also found northward to the Yukon. Eaten fresh, it is of good quality; for salted it is inferior; for canning it is worthless. In closing I wish to say that I am indebted for many of the facts in this article to Prof. D. S. Jordan, of the United States Fish Commission, who has personally examined the salmon of every considerable fishing station as far north as the Frazier, and received specimens from an assistant, who has spent the present season in Alaska.

I cannot close without saying that the conclusions reached by Prof. Jordan are not only undoubtedly correct, but in view of what is now known of ocean currents, are no more than what a thoughtful man might have anticipated. There are two ocean currents on the Pacific Coast of North America. One, a narrow current, one to two miles wide off the capes and headlands, and ten to twenty along the bays, runs northward, close to the shore. The other, an immense ocean river, of which the first is only the eddy, turned from its course by the Aleutian Islands and Alaska, sweeps along the coast, downward to the tropics. A salmon from the Sacramento has only to drift on the inner current to find himself in a few months, and without effort of his own, at the mouth of Frazier or the Yukon; and one from the Yukon at the Frazier, in the outer current, would soon reach the mouth of the Columbia or the Sacramento. I do not pretend or suppose that any considerable part of the salmon of any river are so drifted about by ocean currents; but I do believe that enough are so drifted for purposes of colonization. I think, if the trout could be known, it would be found that enough are drifted in this way to make those who have given no thought to the subject. The history of the shad introduced a few years since into the Sacramento is a case in point. They had scarcely attained a length of eleven inches, before specimens began to be taken in the Columbia; and when we think how small is the seining ground on which these shad are caught, it is safe to estimate that there are hundreds, and perhaps thousands, in the river for every one taken; and were it not for their successful propagation, we might look to see the whole Pacific Coast stocked before many years from the one importation to the Sacramento.

C. J. SMITH.

THE PRIZES AT THE GERMAN EXHIBITION.—The *Fischerzeitung* says that the honorary prizes (diplomas,

awarded at the Berlin Fishery Exhibition are completed and ready for transmission. The medals (with diplomas) will be ready early in autumn. The Wurtzburg prizes are finished and ready to be sent to their owners.

SAILING EGGS—PROPER CREDIT.—One of our German correspondents writes as follows: "In your issue of July 29th it is said that the German government has presented a lot of eggs of the saibling, *Salmo salvelinus*, to Mr. Livingston Stone. The error is slight, yet as it is a question of placing the credit in the proper place, it is only fair to say that the government had nothing to do with the matter, as the eggs were sent entirely at the cost of Mr. von dem Borne, the celebrated fish culturist of Berneuchen, who packed them in snow, in which they arrived in America in good order."

Our correspondent also writes that some eggs of brook trout, sent from this country to Germany last winter, arrived in very bad order; in fact were warm and rotten.

SOLES IN AMERICA.—We have received a communication on this subject, from an anonymous correspondent, with only his alleged initials signed. His statements have no value whatever when given in this way, and if he will send in his address to this office we will consider the propriety of publishing his letter. If he does not care to have his name appear it will not, but we must be satisfied regarding his competency to speak on this subject before we print his letter. Again and again we have said that it is useless to write to us anonymously, and if correspondents would only remember it, it would save both trouble. We require the name as a guarantee of good faith merely in most cases, but in the present case we have grave doubts if the writer is competent to identify a sole, a doubt which he can easily dispel if he is familiar with them.

WORK OF THE FISH HAWK.—The new fish-hatching steamer, in the absence of fish eggs to hatch, is engaged in the investigations of the fish commission at Newport, and made a most remarkable day's work about a fortnight ago, in which over 120 species, vertebrate and invertebrate, were added to the fauna of Southern New England, by trawling in 200 fathoms, sixty miles south of No Man's Land. Our informant, who was on the spot last week, writes that Prof. Goode had just finished a paper, describing seven new species of fish which are included in four new genera, from that day's work.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN SEPTEMBER.

FRESH WATER.

Grayling, *Thymallus tricolor*.
Lake Trout, *Salmo naizichish*.
Muskellunge, *Esox nubilus*.
Pickering, *Esox richardsoni*.
Pike or Pickerel, *Esox lucius*.
Pike-perch (walleyed pike) *Stizostedion americanum*, *a. gulosum*, etc.
Yellow Perch, *Perca flavescens*.
Striped Bass, *Morone chrysops*.
White Bass, *Morone chrysops*.

SALT WATER.

Sea Bass, *Centropristis atrarhis*.
Sheepshead, *Archosargus probatocephalus*.
Porgie, *Stenotomus argyrops*.
Striped Bass, *Morone chrysops*.
White Perch, *Morone americana*.
Spot, or *Leiostomus*, *lecontei*.
Spot, Redfish, or Channel Bass, *Sciaenops ocellatus*.
Tautog, *Tautoga onitis*.
Pollock, *Pollachius carbonarius*.

Black Bass, *Micropterus*. ("Two species.")
Rock Bass, *Ambloplites*. (Two species.)
War-mouth, *Channorythys gulosus*.
Carp, *Pomoxis nigromaculatus*.
Bachelors, *Pomoxis annularis*.
Chub, *Somnilus corporalis*.

Sea Trout, *Cynoscion carolinensis*.
Weakfish, *Cynoscion regalis*.
Shore Whiting, *Menticolus littoralis*.
Croaker, *Micropterus undulatus*.
Black Pompano, *Centrolophus niger*.
Spanish Mackerel, *Scomber molle*.
Atlantic Croaker, *Cynoscion nebulosus*.
Bonito, *Sarda sarda*.
Kingfish, *Menticolus nebulosus*.

THE FLY IN NORTH ELBA.

AU SABLE FORKS, N. Y., Aug. 2d.

ON last Thursday morning at 7 o'clock, my wife and I left our pleasant home in this village, for a short trip among the trout streams. We drove across the Flume, along the banks of the Au Sable River, through Wilmington Notch, past the foot of Whiteface Mountain, and feasted ourselves upon some of the wildest and grandest scenery in the Adirondacks. This feast of the eye and mind, however, did not spoil our appetites for the pleasant lunch we took on the banks of the river, just before we reached the bridge of North Elba.

We arrived at Cameron's, the place of our destination, a little before 2 o'clock, having enjoyed one of the most delightful drives of our remembrance. The sky, which until now had been almost perfectly clear, began to cloud over, and before we got our things fixed and ready for fishing, the rain was falling furiously. I unpacked my Orvis rod, attached my reel, and arranged three flies upon my new "mist-colored" leader, and waited for a lull in the storm, which soon came, though the rain did not entirely cease falling. I slipped on my light waterproof, while Mr. Cameron, who offered to accompany me, got himself into one of the heaviest of black overcoats, and we started for the pond, which lay about a quarter of a mile below us in a lonely meadow. This pond is made by a dam across Ray Brook, and will perhaps average twenty-five feet in width, and is somewhere about half a mile in length, though it is hard to tell where the pond ends, and the brook commences.

When we reached the pond, we found that the old flat-bottomed boat we were to use was on the opposite side, but Mr. Cameron was equal to the emergency, and taking off his clothes (including the black overcoat), he waded over and returned with the boat; in the meantime I whipped the stream, but either Mr. Cameron (without his clothes and overcoat), had frightened the fish, or else there were not many just at that place, for I only caught

two little fellows. We got into the boat, and started slowly down stream until we came in reach of a famous hole, from which I had taken many a fine fish in years gone by. We pushed one end of the boat upon the opposite bank, and waited for a few minutes until the trout had time to recover from any uneasiness that our approach may have caused them. In a short time they were jumping all around us: fine fellows, over a foot long would spring clear out of the water, and show their rainbow tinted sides as they tumbled back again. I stood up in my end of the boat, pulled out about fifteen feet of line, made a cast close to the shore, in the shallow water, to get my line out, and to see if everything was all right, and then swinging my line behind me, I brought my fly forward when they flew close to the opposite shore, in the deepest water, and where the largest fish were leaping. I had just time to see that they had fallen straight and lightly, when the water splashed and I gave a jerk. My reel started as my line led down stream. This went on for some seventy feet, when a turn in the stream was about to bring my line into the brush, so I put my finger on the reel, and turned the butt of my light pole toward the fish, the graceful rod bent until the tip had passed my hands, when it began to straighten, and I knew my game had been stopped. My line ran up stream, only a few feet, when I knew that I had hooked something strong and plucky on my hook. It then occurred to me that I had forgotten my landing net. It must have been some twenty minutes before resistance ceased, and my fish were slowly led upon the mud, where they lay quietly until Mr. Cameron lifted them with his hands into the boat. On the first fly we found a trout weighing about three-quarters of a pound, a smaller fellow on the next hook, and a noble fellow which afterward weighed one pound and fifteen ounces, on the end hook. This last proved to be the largest of the lot, and was taken upon a fly. The sport was continued until we had eight trout, I having taken two upon another cast, and three upon another, the smallest of which weighed a little over half a pound.

With a little excusable pride, Mr. Cameron was anxious that we should get home, so as to display our fish as the mail stage passed, but we were too late for the stage. As we were hurrying for the stage, Mr. Cameron, who a short time before had been fearing a frost, remarked upon the sudden change in the weather, and looked a little blank when I told him that it was cold enough outside of his overcoat.

As soon as some of our fish could be cooked, supper was announced, and we were ready for the supper. The supper was all that could be desired, and by no means its least recommendation, was the neatness and cleanliness of everything about the dining room and table. Mr. Cameron has a large new house, with accommodations for some forty guests; the rooms are moderately furnished with new cottage furniture, with spring beds, hair mattresses, and sheets as clean, white and pure as a politician's record painted by his own organ.

We went to bed early, and slept soundly. Friday morning foretold a splendid day. After a good breakfast, and a smoke, my wife and I started for the stream, with young Byron Cameron as guide, and Jenny Cameron as company and guest. Byron is a bright boy of some thirteen summers, and Jenny is a sweet, pretty child, some two years younger.

When we reached the brook the sun was very bright, the water clear, and not a breath of air to make a ripple upon its surface, consequently the trout rose to the fly slowly, but since we did not need the fish, we were not disappointed. Byron made suggestions which indicated that he was getting a little suspicious of my skill as a fisherman, but by following his advice with no better results, he was silenced if not satisfied. We soon, however, had twelve, the number agreed upon before we left the house, and on two occasions I took two at one cast. These twelve weighed eight pounds, three ounces, and five tenths. While fishing, we saw a hawk strike a bird, which fell perfectly dead on the bank near us, we went and got the dead bird and found it to be a night hawk. My wife was greatly interested in the sport, and handled the fishing net so dexterously, that Byron and I decided to trust her with the pole for a short time. I reeled up to six feet of line, cut a nice bait out of the breast of our dead night hawk, which I put on the end fly and handed her the pole.

She made a cast, the pole struck the water and the line fell in a lump at the end of the pole, but since the pole did not break, I felt easy. A three-quarter pounder took the hook, but the reel would not play, because her hand was over the line. Byron held the landing net, while I trembled for my pole, but finally the fish was landed safely. We gave a lecture upon the management of the reel, and she made another cast; this time she held the pole out over the stream, and I tossed the hook in, a trout took the bait and the reel started, and while the flies were dragging through the water, another trout took one of them, and I was then certain that my pole was gone, but fortunately it got off again, when my wife heroically snatched the remaining fish clear out of the water into the boat. I am now convinced that simply because a woman possesses all of the christian virtues, it is no reason why she should be trusted with an Orvis rod.

We went to the house and talked until dinner was announced, and after we finished eating, we ordered our team and drove over to see a visit to our old friend Mr. Dan'l Ames. Mr. Ames is one of the old settlers in North Elba, rather a hard man to get acquainted with, but he has a kind, warm heart, a good deal of humor, and a great deal of sound sense, with an unusual attachment to his friends. After our visit, we drove back to the hotel, when I took my rod and went down to where we had left the boat. The sky was a little cloudy, a light wind made a slight ripple upon the water, and the trout bait with the active fly of New Jersey acquired a new life. I sat at the end of the boat, and watched the fish jump, and whenever one a little larger than his fellows showed himself, I dropped a fly as nearly as possible where he went down.

Having an excess of time, I humored every fish until it was willing to be landed without a struggle, and too soon had my complement of twelve. These twelve weighed five pounds and seven ounces. While playing with a three-quarters of pound fellow, I noticed a piece of a line attached, and when I landed him I found a trout of his own mouth, fast to his hook, and containing three flies. With this leader and hooks attached, the trout had risen to the surface and taken my fly. Mr. Cameron told me that that leader was lost on a trout on the 15th

of dog breeding in the case of the terriers, and when it comes to the St. Bernard he states as facts things which have not the slightest foundation in truth. He says the bitch's brother took first prize at Birmingham in 1875. This is false, as no dog or bitch by Russ, out of Mont Blanc ever won a first, second, or third prize at Birmingham, nor for that did one of that pedigree ever win at a show registered in the Kennel Club Stud Book. It is a matter of very great doubt, indeed, whether the bitch shown at Montreal was by Russ out of Mont Blanc, because she has not a single characteristic of a St. Bernard about her. Small in size, black and white in color, and with a snipy head, she certainly looks like a cross-bred dog, with a touch of colley in shape and size, and of Landseer Newfoundland in color. Such a letter as the above should never have found its way into print, but since it has, it is only right its inconsistencies and falsehoods should be exposed.

DOG BREAKING.

FROM VERO SHAW'S ILLUSTRATED BOOK OF THE DOG.

[Reprinted from advanced sheets forwarded to the FOREST AND STREAM, by the author, through the courtesy of Messrs Cassell, Petter, Galpin & Co., Publishers.]

CHAPTER XXXVIII.

Breaking Sporting Dogs.

From almost time immemorial dogs have been the chosen companions of mankind in their pursuit of game. Under any circumstances, it was necessary to educate the dogs in the duties they were required to fill, and it is with this subject that we have now to deal.

It is of course impossible to conjecture how the capacity of each breed for working game came to be displayed in the first instance, but the fact remains that from very early times indeed many breeds had each their respective duties in the field, as they have in the present day.

One of the earliest evidences of the fact that the art of training dogs is by no means a modern one, will be found in the following curious agreement:—

Ribbesford, Oct. 7th, 1685.

"I, John Harris, of Wildon, in the Parish of Haslebury, in the County of Worcester, yeoman, for and in consideration of ten shillings of lawful English money this day received of Henry Herbert of Ribbesford, in the said county, esquire, and of thirty shillings more of like money by him promised to be hereafter pay'd me, do hereby covenant and promise to and with the said Henry Herbert, his executors and administrators, that I will from the day of this date hereof, until the first day of March next, well and sufficiently mayntayne and keepe a Spanish bitch named Quaud, this day delivered into my custody by the said Henry Herbert, and will before the said first day of March next fully and effectually trayne up and teach the said bitch to sit partridges, pheasants and other game, as well and exactly as the best sitting dogges usually set the same. And the said bitch so trayned and taught, shall and will deliver to the said Henry Herbert, or whom he shall appoint to receive her, at his house in Ribbesford aforesaid, on the first day of March next. And if at any time after the said bitch shall for want of use or practise, or otherwise, forgett to sett game as aforesaid, I will at my costes and charges mayntayne her for a month or longer, as often as need shall require, to trayne up and teach her to sett game as aforesaid, and shall and will fully and effectually teach her to sett game as well and exactly as it is above mention'd."

"Witness my hand and seale the day and year first above written.

"JOHN HARRIS, his X mark.

"Sealed and delivered in presence of—

"H. PAYNE, his X mark."

Gervase Markham, however, previously to this, had alluded to his work, "Hunger's Prevention, or the Art of Fowling," to the taking of partridges with the setting dog, in the following words:—

"The fourth and last way for the taking of partridges (and which indeed excelleth all the other for the excellency of the sport and the rareness of the art which is contained therein) is the taking of them with the setting dogge, for in it there is a twofold pleasure, and a twofold art to be discovered, as first the pleasure and the art proceeding from the dogge, and is contained in this manner of ranging, hunting and setting, and then the pleasure and art in the bird hunted. Being come into the fields or haunts where partridges doe frequent you shall there cast off your dogge, and by crying 'Hey-tes' or 'Hey-whir,' or such like words of encouragement, according to the custome of his own nature or education, give him leave to range or hunt, which as soon as hee beginneth to doe, you shall then cease from any more words, except any fault or mistaking enforce you, and then you shall use the words of correction or reprehension due for that purpose, and in all his hunting and labour you shall have great and speciall heede that hee never range too farre from you, but beate his ground justly and even, without casting about or flying now here and now there, and skipping many places, which the heate and mettall of many good dogges will make them do if they be not reprehended, and therefore when any such fault shall happen you shall call him in, and with the terror of your countenance so threaten him, that he shall not dare all that day after to doe the like.

Now if in this ranging and hunting you chance to see any dogge to make a sudden stop, or to stand still, you shall then presently make in to him (for he hath set the partridge), and as soon as you come to him you shall bid him goe nearer, which if he doe you shall still say to him, 'Go nearer, go nearer,' but if you find hee is unwilling to goe or creepe nearer, but either lies still, or stands shaking of his taile, as who should say they are under my nose, and with all, now and then looks backe upon you, as if he would tell you how near they are, then presently you shall cease from further urging of him, and say to him, 'You see how the coverer's truth, you shall then first charge the dogge to lye still, and then, drawing forth your net as you walke, having pricked downe one end to the ground, do."

The above quotations prove that the breaking of field dogs was carried on in very much the same manner 200 years ago as it is in the present day, though the tactics of sportsmen are materially altered. As will be seen from Gervase Markham, the birds were surrounded by a net, and the object of the hunter was to prevent their rising, but the duties of the setter is by no means greatly changed by the march of civilization.

Upwards of a hundred years before the date of Gervase Markham's work, Dr. Caius refers in his book to the taking of birds in the net in the field, and distinctly alludes to the trained setting dogs used in the sport which he classes with the spaniel, and notices, under the name of Indles.

Having thus shown that the art of training sporting dogs is not entirely due to its modern exponents, though it has naturally been reduced to a science by them, we propose laying before our readers some hints from the pen of Mr. James Fletcher, of Glenmarkie Lodge, Huntley, Aberdeenshire, N. B., whose experience in breaking operations is both practical and extensive.

(To be Continued.)

DOG BREAKING.—We publish this week the first of the chapters of Mr. Vero Shaw's "Book of the Dog" on this subject. Advance sheets have been forwarded by Mr. Shaw exclusively to the FOREST AND STREAM, and others will follow. For this high compliment to ourselves and courtesy to our readers we take the first opportunity to express our appreciation and indebtedness.

ACCIDENT TO REX.—All lovers of a good dog will learn with regret of the misfortune which has come to the champion pointer dog Rex, the property of Mr. Fisher Howe, Jr., of this city. Through the gross carelessness of a well-known handler Rex was struck by the locomotive of an express train, the result being a badly broken shoulder and a compound fracture of the left fore-leg. The circumstances of the case, are extremely distressing, as Mr. Howe was about entering Rex for competition at the St. Louis Bench Show, and supposed that his famous dog was in his best show form. It appears, however, that Mr. Howe was kept in ignorance of the fact, and the broken leg allowed to knit without the proper surgical care. Let this misfortune to this splendid dog act as a warning to all sportsmen to whom they intrust their dogs.

From this brief mention of the occurrence, sent by Mr. Howe, we judge that the dog will never again be fit for either field work or the show bench. Rex has been so frequently mentioned in our columns and has centered so much attention upon himself at the bench shows in this and other cities that further mention of him seems superfluous.

Reference to our files and to the catalogues shows that Rex has been repeatedly placed in the front rank by the votes of such critical judges as Messrs. Davidson, Saltus, Hammond, Colburn, Wise, Dr. Jarvis, Mr. Chas. H. Raymond, Mr. Hugh Dalziel and others. It is to be hoped that the injuries will not result fatally, for as a stud dog his superior breeding, fine form and field quality, should make Rex still one of the most valuable heavy pointers in the East.

CANADIAN KENNEL CLUB.—The formation of a Canadian Kennel Club, similar in all respects to the National American Kennel Club in this country, is an event worthy of the attention of all sportsmen on both sides of the line. It points to the large increase of dog men in the Dominion, and the consequent necessity of establishing an association that will be looked up to as a power in the land. The initial meeting took place at the Rossin House, Toronto, Ont., last week, when the following well-known gentlemen were present: Messrs. L. H. Smith, Stratbroy; Dr. Niven, London; R. Tanning Jr., John Maughan, J. Spooner, C. A. Brough, J. B. Bormer, Bruce Macdonald, A. J. Robertson and Leslie, Toronto. On motion, Mr. Smith took the chair, and Mr. Bormer acted as secretary pro tem. After an important discussion as to the advisability of forming a club, it was moved by Mr. Leslie, and seconded by Dr. Niven, that the club be called "The Canadian Kennel Club," which was adopted. The election of officers was then proceeded with, with the following result: President, Mr. Christopher Robinson, Q. C., Toronto; Vice-President, Mr. L. H. Smith, Stratbroy; Secretary, Mr. A. D. Stewart, Toronto; Treasurer, Mr. J. Maughan, Toronto. Committee, Dr. Niven, London; Mr. Wm. B. Wells, Jr., Chatham; Mr. R. A. Lucas, Hamilton; Mr. J. Spooner, Toronto, and Mr. F. Austin, Ottawa. Mr. Spooner was appointed chairman of the committee. The President, Secretary and Treasurer were appointed a committee to fill any vacancies which may occur in the officers selected.

PENNSYLVANIA FIELD TRIALS.—Mr. J. R. Stayton, Secretary of the Pennsylvania State Field Trials Association, has notified us that the dates of the meeting will be changed from Nov. 9th to the 26th, 27th, 28th and 29th of October, thus bringing the event two weeks earlier.

NEBRASKA FIELD TRIALS.—The executive committee of the Nebraska State Sportsmen's Association, have nominated the following gentlemen for judges of the field trials to be held at Millford, September 30th, October 1st and 2nd, 1880. All Age Stakes.—C. F. Lewis, Hon. Geo. B. Lake, of the Supreme Court, and Hon. B. E. Kennedy, Omaha. Puppy Stakes.—F. Satterthwaite, Hon. Charles P. Matthews, Speaker of the House of Representatives, and Hon. S. M. Chapman, of Plattsmouth. Brace Stakes.—Henry Miller, Esq., of Corning, Iowa; Nathan Doxy, Esq., of Geneseo, Ill., and Capt. E. S. Hawley, of Nebraska City, Nebraska.

The committee desire to assure the owners of dogs that the gentlemen named for judges are thorough sportsmen, and fully competent to act in the capacity

assigned them, and no one need fear anything but justice and fair play at their hands. Entries will be received up to the evening of Sept. 29th, and not to Aug. 31st, as stated in the programme. Game is abundant in the vicinity where the trials are to be held, and a good attendance is already assured.

J. C. McBRIDE, President,
J. H. HAWLEY, Secretary,
GEORGE M. MILLIS,
Executive Committee.
Both Mr. Satterthwaite and Mr. Lewis declined.

THE COLLEY TRIALS.—The international sheep dog trials, held under the auspices of the Pennsylvania State Agricultural Society, at Philadelphia, were begun on Tuesday of this week, the management being under the personal direction of Dr. L. A. Twaddell. In our next issue we will give a full description of the trials, as our kennel editor is at present in Philadelphia attending them. The entries, with the name of the owner, as well as that of the dog, are as follows: John Bickney, Philadelphia, dog Joe; George Aitkin, Northport, Suffolk County, N. Y., Shepherd Lass and Clyde; George Taylor, Philadelphia, dog Lad; W. H. Blackburn, Philadelphia, dog Shep; Charles Pugh, Philadelphia, dog Tom; S. Sharpless, Philadelphia, Gipse; T. S. Cooper, Coopersburg, Pa., dog Oscar; Dr. J. W. Downey, New Market, Md., Lady Scotland and dog Tweed Second; John McAnally, West Philadelphia, dog Shep. In the puppy class T. S. Cooper enters Fannie; George Aitkin, Young Carlisle, and Dr. J. W. Downey, Lady Scotland.

ESSEX COUNTY HUNT.—Meets for September, 1880: Saturday, Sept. 25th, at 5 P. M., at cross roads, Orange, near St. Mark's Church, Wednesday, Sept. 29th, at 5 P. M., Wright's Hotel, Montclair. F. M. WHEELER, M. F. H.

GORDON SETTER PUPPIES.—A gentleman advertises a litter of Gordon setters by Glen out of Belle for sale. Belle is an imported bitch, the winner of two firsts in Ireland, and Glen won in the Brace Stakes of the Eastern Field Trials last year. The puppies are a promising lot, so far as looks go, and they can hardly fail to be good in the field.

KANSAS FIELD TRIALS.—Mr. A. C. Waddell, of Topeka, Kansas, writes us that nothing has been arranged about the Kansas Field Trials.

KENNEL NOTES.

WHEELS.—Ruly 11.—Mr. H. B. Richmond's (Lakeville, Mass. pointer bitch Ruby II, whelped, Aug. 26th, twelve puppies, seven dogs and five bitches, by his Snipe-English, Colburn's Belle. Bessie.—Mr. H. B. Richmond's English setter bitch Bessie whelped, Aug. 31st, nine puppies, six dogs and three bitches, by Oakes' Dash II-Daisy Dale. Dell.—Mr. J. J. Jumelle's (Dequoin, Ill.) Dell-Champion, Bob-Champion Duck, whelped eight puppies, three dogs and five bitches, to owner's Elcho II, all solid deep red color. Queen o' Strads.—Mr. A. M. Waddell's (Louisville Ky.) bitch, Queen o' Strads, Gladstone-Mersey, whelped, Aug. 18th, eight puppies, four dogs and four bitches, color white, and white and black, to Lincoln. Gratitude.—Mr. A. M. Waddell's foxhound bitch Gratitude whelped, Aug. 2d, three puppies, two bitches and one dog, color white, black and tan, to Chorister. Gratitude was bred in England.

SALES.—Queen Mab and Glen.—Mr. Arnold Burgess has sold his champion Queen Mab to his brother, Tristram Burgess, of San Francisco; also Glen, by champion Rob Roy, out of Davidson's Doll (sister to Druid), to Dr. Sullings of Kalamazoo, Mich.

DEATH.—Duke.—Brooklyn, N. Y., Sept. 13th, 1880.—On Friday last I lost, by disemper, my Gordon setter Duke, out of the late Mr. Tilston's Lou, by Jerome Marble's Grouse. When seven months old he took first prize at Westminster Kennel Club show, 1878, and again was awarded 1st C. at the same show, where many of the other and older prize winners were unmentioned. Duke was the fastest dog in the field that I ever knew, and that quality, combined with a very keen nose and beauty of form, rendered him a very valuable animal. I had anticipated having royal sport with him this fall, but his death leaves me now without any dog whatever, and I know I shall have great difficulty in replacing him, as dogs like him, combining exceptional field and bench qualities, are not to be found easily. W. H. HUNTINGTON.

The Rifle.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE CREEDMOOR FALL MEETING.

CREEDMOOR during last week was a busy place in the conduct of the Eighth Annual Fall Prize Meeting. In general it passed off very successfully, though there was the usual amount of growling in cases where the crowd of the many showed to trample on the rights of the few. "There were not pool targets enough" is the verdict of so many that it would seem well founded, and it does certainly look a little like bad management where a contest such as the champion's has its stages two days apart on the programme. There was good shooting weather from the start, and no delays were chargeable to the elements. Col. Bodine, while nominally the executive officer, had much aid from Col. J. G. Story, who was the virtual controlling spirit of the meeting. The matches were in general well distributed, and the almost entire absence of protests bears testimony to the fairness of the contests. The rule about angled shots should be a definite one, and to change it from one day of a meeting to another is very embarrassing to contestants. Without the right of challenge the markers in the butts are the real arbiters of the meeting, and unless a very sharp eye is kept upon them carelessness must creep in. The checks against reckless challenging are abundant, and there is no reason why a practice which gives general satisfaction at the regular monthly matches of the association should not hold during a fall meeting. The management ascribed some of the want of harmony in the details of the meeting to the large number of post entries, but by a proper separation of the military and all-arms contests there seems no good reason why ample accommodation should not be found for all who wish to enter the matches. All through the meeting the rivalry between the regulars and the militiamen was very keen, and the honors were very evenly distributed. New York State comes out of the

The First and Second Division matches followed, for troops of New York City and Brooklyn respectively. The repressive policy of the National Guard authorities of the State was seen in the small team entry list, and the contest was a mere drifting race. In previous years these matches have been well fought, their records standing:—

First Division.				Second Division.			
Year.	Winners.	Score.	No. teams.	Winners.	Score.	No. teams.	
1855	224	260	10	23	181	5	
1856	124	117	11	22	207	7	
1857	1875	447	9	23	414	6	
1858	714	423	7	23	406	6	
1859	714	423	6	23	406	6	
1860	714	423	6	23	406	6	
1861	714	423	6	23	406	6	
1862	714	423	6	23	406	6	
1863	714	423	6	23	406	6	
1864	714	423	6	23	406	6	
1865	714	423	6	23	406	6	
1866	714	423	6	23	406	6	
1867	714	423	6	23	406	6	
1868	714	423	6	23	406	6	
1869	714	423	6	23	406	6	
1870	714	423	6	23	406	6	
1871	714	423	6	23	406	6	
1872	714	423	6	23	406	6	
1873	714	423	6	23	406	6	
1874	714	423	6	23	406	6	
1875	714	423	6	23	406	6	
1876	714	423	6	23	406	6	
1877	714	423	6	23	406	6	
1878	714	423	6	23	406	6	
1879	714	423	6	23	406	6	
1880	714	423	6	23	406	6	

The full score of this match for 1880 is given as follows:—

Twenty-third Regiment.			
N. L. Candee	200 yards.	4155-25	42
D. De Forest	200 yards.	4155-25	42
J. B. Frothingham	200 yards.	4155-25	42
L. Holmes	200 yards.	4155-25	42
F. A. Hand	200 yards.	4155-25	42
J. M. Robertson	200 yards.	4155-25	42
C. W. Maudslayi	200 yards.	4155-25	42
F. J. Gould	200 yards.	4155-25	42
C. M. Blosson	200 yards.	4155-25	42
R. M. Johnson	200 yards.	4155-25	42
C. W. Preston	200 yards.	4155-25	42
L. J. Shepherd	200 yards.	4155-25	42
Total	220	245	472

Fourteenth Regiment.			
H. Nutt	200 yards.	41412-18	55555-25
E. S. Broome	200 yards.	41412-18	55555-25
F. D. Stellingway	200 yards.	41412-18	55555-25
C. W. Maudslayi	200 yards.	41412-18	55555-25
T. M. Harvey	200 yards.	41412-18	55555-25
John Verry	200 yards.	41412-18	55555-25
C. W. Maudslayi	200 yards.	41412-18	55555-25
H. C. Judson	200 yards.	41412-18	55555-25
J. H. Woodward	200 yards.	41412-18	55555-25
F. Schullin	200 yards.	41412-18	55555-25
J. J. Dixon	200 yards.	41412-18	55555-25
W. W. Nutt	200 yards.	41412-18	55555-25
Total	210	204	414

Seventh Regiment.			
W. T. Underwood, Jr.	200 yards.	55555-25	33344-20
J. L. Price	200 yards.	55555-25	33344-20
C. F. Fazio	200 yards.	55555-25	33344-20
T. L. Underwood	200 yards.	55555-25	33344-20
F. Alder	200 yards.	55555-25	33344-20
E. W. Price	200 yards.	55555-25	33344-20
C. W. Maudslayi	200 yards.	55555-25	33344-20
W. E. Hatfield	200 yards.	55555-25	33344-20
H. B. Thompson	200 yards.	55555-25	33344-20
C. W. Maudslayi	200 yards.	55555-25	33344-20
F. C. McLeewee	200 yards.	55555-25	33344-20
C. F. Robinson	200 yards.	55555-25	33344-20
Total	237	222	459

Eighth Regiment.			
W. H. Cochran	200 yards.	54435-21	54322-18
T. R. Murphy	200 yards.	54435-21	54322-18
A. Douglas	200 yards.	54435-21	54322-18
C. G. Foster	200 yards.	54435-21	54322-18
N. H. Devar	200 yards.	54435-21	54322-18
A. Geo	200 yards.	54435-21	54322-18
F. D. Scott	200 yards.	54435-21	54322-18
C. Helman	200 yards.	54435-21	54322-18
J. H. Borsford	200 yards.	54435-21	54322-18
W. H. Reed	200 yards.	54435-21	54322-18
J. H. Batston	200 yards.	54435-21	54322-18
S. Steinger	200 yards.	54435-21	54322-18
Total	207	203	410

The Cavalry State Match had almost another walkover, the Yates Dragoons coming down to almost certain victory. The score stood:—

Troop "C," Yates Dragoons, Syracuse.			
O. G. Jones	414545-21	F. Swab	420343-21
W. Gordon	444344-27	C. Brown	400333-14
L. Abbot	434344-21		
H. A. Pratt	444333-21		
H. Smith	344301-23		
Total	167		

Separate Troop "B," New York City.			
J. J. Fay	214333-24	P. F. Davis	254301-22
H. E. King	344324-23	C. W. Barker	025910-31
N. B. Burris	313334-24		
J. H. Pitt	214323-20		
Total	117		

The Directors had their little *jeu d'esprit* during the afternoon, and Co. B. received once more took possession of the Albany Directors' badge. The scoring was really good, and it is fair to say that it took place on a special target. The score stood:—

H. A. Gildersleeve	5444-21	J. G. Story	2335-17
W. W. Wignate	4334-20	G. S. Schenckhorn, Jr.	4242-16
L. Abbot	4334-20	J. H. Cowperthwaite	4450-10
F. J. Donaldson	3344-18		
Total	145		

The Military Team Match ran through the day, and some of the teams were unfortunate enough to strike a rain squall which came up in the middle of the day. The superiority of the special Springfield in use by the Creedmoor representatives of the army was very manifest in the fine score of the winning team. This match, which up to this year has been a spring meeting event, was won in 1878 by Co. I, Seventh Regiment, with 131 points; in 1877 by Co. B, Engineer Battalion, U. S. A., 127 points; in 1876 by Co. C, Engineer Battalion, U. S. A., 122 points, and again last year by the same team with 156 points:—

Co. B, United States Engineers.			
Corpl. Barrett	444545-31	M. B. Blakey	544354-30
Corpl. Miller	434344-29	Geo. E. Nesting	454344-29
Pvt. Krebs	334444-27	G. E. Hitchcock	434353-27
Corpl. Von Schon	444443-27	L. A. Wilkinson	344444-25
Pvt. Way	444445-26	H. W. Greenland	444443-26
Total	145		
Co. B, Twelfth Regiment, New York.			
Sergt. Royston	454444-29	Capt. Burns	434445-28
Capt. Quinn	454444-29	Sergt. Ross	434445-28
Sergt. Renoud	454444-29	Pvt. Paulding	334444-26
Pvt. Dwyer	334444-26	Serg. Van Heusen	344444-26
Sergt. Kelley	424443-24	Pvt. Wood	334445-26
Total	137		
Twentieth Separate Co., Second Team, Binghamton, N. Y.			
O. A. Mori	544444-29	Capt. R. E. Buscom	334444-28
C. W. Maudslayi	434444-27	Leut. E. Munich	444444-28
C. B. Smith	433544-27	Chas. Leet	444444-27
J. P. Northing	434404-24	Leut. J. H. Parke	434444-27
H. Beaver	434433-24	K. Wilcox	404444-23
Total	134		
Co. C, United States Engineers.			
Capt. J. C. Mallory	444555-30	O. B. Brower	444443-28
Leut. T. A. Bingham	444535-28	W. R. Zimmerman	434443-27
Pvt. J. Cavanaugh	444433-27	H. N. Otis	344444-26
Pvt. Reeker	344433-27	E. K. Rums	344433-25
Total	132		

Co. H, Seventh Regiment, New York.			
Pvt. E. W. Price	454454-29		
Capt. J. L. Price	434445-28		
Pvt. W. J. Underwood	334343-23		
Pvt. H. H. Titus	334343-23		
Sergt. H. V. Clements	334343-23		
Total	131		
Troop C, Yates Dragoons, Syracuse, N. Y.			
O. G. Jones	345444-29		
H. Griffin	434443-27		
W. Sadow	434443-27		
L. Abbot	444440-24		
Capt. M. Auer	334443-23		
Total	131		
Twenty-ninth Separate Co., Horseheads, N. Y.			
Wardian	414444-27		
String	444443-27		
Curtis	434443-26		
M. H. Beblon	444443-26		
Purdy	434443-26		
Total	127		
Co. C, Seventh Regiment, New York.			
F. C. McLeewee	243343-26		
J. McKee	344443-26		
J. Alder	344443-26		
W. J. Heiser	344443-26		
H. B. Thompson	414430-23		
Total	123		
Twenty-eighth Separate Co., Elmira, N. Y.			
S. Horsford	434444-26		
D. K. Russell	334444-26		
W. H. Corning	434444-26		
Total	119		

The Short Range Team Match, for teams of four from any club, had plenty of entries and a corresponding amount of disappointment at the result, which gave the first prize to some fine work of the Empire Club team:—

Empire Rifle Club—First Team.			
W. M. Farrow	544555-32	444455-30	63
H. H. Brown	544555-32	444455-30	63
D. F. Davis	444455-32	344444-26	53
J. W. Todd	444533-27	344444-26	53
Total	119	107	226

Massachusetts Rifle Association.			
C. S. Hillman	544555-32	344445-28	61
F. J. Rathbun	544555-32	344445-28	61
T. L. Underwood	444444-29	344444-29	51
J. N. Frye	455333-23	355333-21	50
Total	121	105	226

Pennsylvania State Rifle Association.			
E. O. Shakespear	454555-32	354545-28	60
Wm. Dev. Fouke	454555-32	354545-28	60
J. H. Johnson, Jr.	444455-31	354545-28	53
L. Thomas	544444-29	354545-28	53
Total	118	105	223

Armory Rifle Club.			
F. R. Buel	544444-29	444445-29	53
M. W. Buel	454444-29	354444-29	53
R. T. Hare	444445-30	444443-25	55
J. F. Cranston	444555-31	355334-24	53
Total	118	101	219

Presidio Rifle Club—Second Team.			
J. Pilcher	544555-32	554545-30	62
H. W. Watson	444444-29	444444-29	51
Wm. Ennis	544444-29	354444-29	51
F. E. Pressler	444444-29	354444-29	51
Total	118	101	222

New York Rifle Club.			
A. McInness	544455-31		
J. C. Case	555444-32	213344-25	57
N. O. Donnell	544444-29	354444-29	51
W. H. Dunlap	544444-29	244444-25	51
Total	116	105	221

Presidio Rifle Club—First Team.			
J. H. Sullivan	444455-30	433344-27	57
C. A. Homan	355444-31	444444-29	53
H. W. Watson	444444-29	354444-29	51
E. C. Terry	554444-31	433344-27	57
Total	119	101	220

Empire Rifle Club—Second Team.			
T. J. Dolan	434545-30	433344-27	57
A. H. Cobb	434545-30	433344-27	57
H. F. Clark	444444-28	554444-31	49
J. L. Paulding	444444-28	355333-21	49
Total	115	99	214

Brooklyn Rifle Club.			
G. Jolner	433455-30	444444-29	58
A. H. Anderson	433455-30	444444-29	58
J. H. Hazleton, Jr.	444444-28	554444-31	50
J. H. Roche	444444-28	554444-31	50
Total	112	100	212

Bridgeport, Ct., Rifle Association.			
H. Nichols	444444-29	554550-26	55
D. E. Marsh	444444-29	434444-27	51
H. H. Hubbard	444444-29	434444-27	51
S. C. Kingman	444444-29	345550-21	50
Total	113	93	206

Bridgeport, Ct., Rifle Association.			
H. Nichols	444444-29	554545-26	55
D. E. Marsh	444444-29	444444-27	57
S. H. Hubbard	450451-25	421214-25	50
S. C. Kingman	444444-29	342534-21	50
Total	113	93	206

P. Helm	454443-28	254434-28	344545-30	84
G. Seymour	454443-28	254434-28	344545-30	81
E. Preston	454443-28	254434-28	344545-30	81
J. B. Donovan	454443-28	254434-28	344545-30	70

Total 342 317 1,023

Military Division of the Atlantic.

Lieut. Hobbs	454443-28	254434-28	344545-30	91
Lieut. Clay	454443-28	254434-28	344545-30	90
Pvt. Welch	454443-28	254434-28	344545-30	89
Lieut. Roman	454443-28	254434-28	344545-30	88
Serg. Braden	454443-28	254434-28	344545-30	86
Serg. Van Vleet	454443-28	254434-28	344545-30	85
Serg. Daly	454443-28	254434-28	344545-30	85
Lieut. Griffin	454443-28	254434-28	344545-30	83
Serg. Campbell	454443-28	254434-28	344545-30	82
Serg. Johnston	454443-28	254434-28	344545-30	81
Serg. Blue	454443-28	254434-28	344545-30	77
Lieut. Day	454443-28	254434-28	344545-30	77

Total 331 333 317 1,011

Military Division of the Pacific.

Lieut. J. Wilson	454443-28	254434-28	344545-30	89
Bernard	454443-28	254434-28	344545-30	88
Quinn	454443-28	254434-28	344545-30	88
Petersen	454443-28	254434-28	344545-30	88
Sullivan	454443-28	254434-28	344545-30	88
Presler	454443-28	254434-28	344545-30	88
Kingsbury	454443-28	254434-28	344545-30	88
Robert	454443-28	254434-28	344545-30	88
Homan	454443-28	254434-28	344545-30	88
Terry	454443-28	254434-28	344545-30	88
Frederick	454443-28	254434-28	344545-30	88
Wiesman	454443-28	254434-28	344545-30	88

Total 334 348 322 1,004

State of New Jersey.

F. Dudley	454443-28	254434-28	344545-30	85
T. W. Griffith	454443-28	254434-28	344545-30	86
E. P. Howard	454443-28	254434-28	344545-30	85
A. Anderson	454443-28	254434-28	344545-30	85
J. H. Drumm	454443-28	254434-28	344545-30	83
J. Holmes	454443-28	254434-28	344545-30	82
J. H. Symes	454443-28	254434-28	344545-30	82
L. H. Greve	454443-28	254434-28	344545-30	82
G. Taylor	454443-28	254434-28	344545-30	82
M. Townsend	454443-28	254434-28	344545-30	82
R. Curry	454443-28	254434-28	344545-30	82
E. Haddenhorst	454443-28	254434-28	344545-30	82

Total 335 317 317 969

Connecticut.

H. Atkinson	454443-28	254434-28	344545-30	84
E. H. Williams	454443-28	254434-28	344545-30	84
G. H. Nichols	454443-28	254434-28	344545-30	84
E. W. Whitlock	454443-28	254434-28	344545-30	84
G. W. Newton	454443-28	254434-28	344545-30	84
H. Simon	454443-28	254434-28	344545-30	84
F. P. Thompson	454443-28	254434-28	344545-30	84
F. W. Woodbridge	454443-28	254434-28	344545-30	84
G. G. Le Barnes	454443-28	254434-28	344545-30	84
F. V. Chapin	454443-28	254434-28	344545-30	84
F. Osmond	454443-28	254434-28	344545-30	84
H. Nichols	454443-28	254434-28	344545-30	84

Total 311 336 282 950

Pennsylvania.

D. P. Atkinson	454443-28	254434-28	344545-30	92
H. H. Ives	454443-28	254434-28	344545-30	89
J. C. Hamblin	454443-28	254434-28	344545-30	89
J. Blatter	454443-28	254434-28	344545-30	89
G. B. Hand	454443-28	254434-28	344545-30	89
G. B. Foster	454443-28	254434-28	344545-30	89
J. W. Edison	454443-28	254434-28	344545-30	89
H. Burroughs	454443-28	254434-28	344545-30	89
G. B. Thompson	454443-28	254434-28	344545-30	89
Jas. A. Fuller	454443-28	254434-28	344545-30	89
G. H. Welles	454443-28	254434-28	344545-30	89
E. A. Leopold	454443-28	254434-28	344545-30	89

Total 334 331 289 954

The match for the military championship of the United States, with its 2 stages and 6 ranges to be shot over, was scattered through the whole meeting and resulted in a general tie for the regulars. It is the custom of the King's Prize of Wimbledon and in proportion to numbers engaged will compare favorably with it. This, too, is a contest dating back to 1878, and in that year C. H. Eagle, of the Seventh Regiment N. G. S. N. Y., took the first stage with 21 at 200 yards, 29 at 500 yards and 29 at 600 yards, total 87, while Corp. J. S. Barton, of the Forty-eighth Regiment N. G. S. N. Y., took the second stage with scores of 31 at 800 yards, 33 at 900 yards and 18 at 1,000 yards, total 75. 1879 was a favorable time for regulars, and at the first stage E. P. Wells, of the Second Infantry U. S. A., took the first stage with 39 at 200 yards, 50 at 500 yards and 50 at 600 yards, total 139, while Lieut. G. N. Whistler, of the Fifth Artillery, with 24 at 800 yards, 23 at 900 yards and 24 at 1,000 yards, total 75. The scores in full of the year stood as follows:—

	200 Yards.	500 Yards.	600 Yards.	Total.
C. Bernard	444433-27	454444-31	454445-31	81
B. Otton	444433-27	454444-31	454445-31	81
C. Homan	444433-27	454444-31	454445-31	81
F. J. Clay	444433-27	454444-31	454445-31	81
F. R. Guinan	444433-27	454444-31	454445-31	81
D. B. Atkinson	444433-27	454444-31	454445-31	81
P. Petersen	444433-27	454444-31	454445-31	81
F. Keen	444433-27	454444-31	454445-31	81
J. C. Hall	444433-27	454444-31	454445-31	81
C. Van Orden	444433-27	454444-31	454445-31	81
E. Presler	444433-27	454444-31	454445-31	81
C. Van Vleet	444433-27	454444-31	454445-31	81
G. W. Dougherty	444433-27	454444-31	454445-31	81
G. G. Post	444433-27	454444-31	454445-31	81
C. H. Osmond	444433-27	454444-31	454445-31	81
W. J. Underwood, Jr.	444433-27	454444-31	454445-31	81
C. A. Cleming	444433-27	454444-31	454445-31	81
Jas. Lenned	31	24-81	J. G. Price	27-28
E. Griffin	27	31-84	C. W. Homan	29
E. Preston	32	31-84	J. J. Dankin	29
C. H. Van Heusen	32	31-84	R. Knapp	29
E. Price	29	28-83	G. Seymour	28
W. E. Hatfield	28	28-83	J. Donevan	27
E. H. Hobbs	28	28-83	J. E. Eagle	27
D. B. Husha	28	28-83	J. L. Paulding	27
J. P. Eicher	30	31-83	N. W. Whistler	26
F. E. P. Howard	29	29-83	J. Wilson	24
J. C. McClure	28	28-83	J. J. Deuman	24
L. E. Lyman	28	28-83	G. W. Patterson	23
J. H. Sullivan	31	31-83	P. W. Griffith	23
C. H. Post	31	31-83	P. W. Griffith	23
M. J. Blakey	26	26-81	N. A. Day	27
H. Floyd	27	27-81	N. A. Day	27
G. W. Munson	26	26-81	N. A. Day	27
P. J. Lauritzen	25	25-81	R. Griffin	24
D. J. O'Neil	26	26-81	R. Griffin	24
E. C. Perry	26	26-81	R. Griffin	24
L. H. Greve	29	29-81		

One objection was made to the taking of the second stage by S. H. Day, as he fired first at 1,000 yards and then came back to the lower ranges. At the time the match was fired at long range he was firing with the division of the Atlantic team at the mid ranges, and it looks very hard to expect him to shoot at two places at one and the same time as laid down in the schedule of matches. The scores of the match stood:—

	800 yards.	900 yards.	1,000 yards.	Total.
S. A. Day	444433-27	444433-27	444433-27	81
J. G. Post	444433-27	444433-27	444433-27	81
J. L. Paulding	444433-27	444433-27	444433-27	81
J. R. Atkinson	444433-27	444433-27	444433-27	81
T. J. O'Neil	444433-27	444433-27	444433-27	81
N. W. Whistler	444433-27	444433-27	444433-27	81
L. H. Greve	444433-27	444433-27	444433-27	81
A. B. Van Heusen	444433-27	444433-27	444433-27	81

J. O. Mallory	444433-27	444433-27	444433-27	81
T. W. W. Griffith	444433-27	444433-27	444433-27	81
C. V. Denman	444433-27	444433-27	444433-27	81
R. V. Houghton	444433-27	444433-27	444433-27	81
L. J. Price	444433-27	444433-27	444433-27	81
R. C. Van Vleet	444433-27	444433-27	444433-27	81
C. A. Cleming	444433-27	444433-27	444433-27	81

During the day a supplementary match had been carried on and met with a liberal support. It was open to everybody: 500 yards, any military rifle (an allowance of one point on each entry to military rifles of 50 caliber) rounds; 7 position, any within the rules. The highest aggregate score of any two entries for count in determining the prize winners, but no competitor to take more than one prize. The scores for the match stood:—

D. H. Ozden	454445-32	454445-32	454445-32	87
B. Blue	454445-32	454445-32	454445-32	87
G. W. Douglas	454445-32	454445-32	454445-32	87
A. B. Van Heusen	454445-32	454445-32	454445-32	87
B. Otton	454445-32	454445-32	454445-32	87
L. J. Barnes	454445-32	454445-32	454445-32	87
T. J. Dolan	454445-32	454445-32	454445-32	87
E. Bernard	454445-32	454445-32	454445-32	87
W. M. Farrow	454445-32	454445-32	454445-32	87
G. E. P. Howard	454445-32	454445-32	454445-32	87
A. McInnes	454445-32	454445-32	454445-32	87
D. R. Atkinson	454445-32	454445-32	454445-32	87
C. H. Lauritzen	454445-32	454445-32	454445-32	87
C. V. Houghton	454445-32	454445-32	454445-32	87
L. W. Wilson	454445-32	454445-32	454445-32	87
T. W. Griffith	454445-32	454445-32	454445-32	87
C. W. Kingsbury	454445-32	454445-32	454445-32	87
L. Dink	454445-32	454445-32	454445-32	87
C. H. Eagle	454445-32	454445-32	454445-32	87
C. A. Cleming	454445-32	454445-32	454445-32	87
A. A. Munson	454445-32	454445-32	454445-32	87
C. H. Osmond	454445-32	454445-32	454445-32	87
P. Petersen	454445-32	454445-32	454445-32	87
H. H. Inalls	454445-32	454445-32	454445-32	87
W. H. H. H.	454445-32	454445-32	454445-32	87
C. W. Homan	454445-32	454445-32	454445-32	87
W. H. Quinn	454445-32	454445-32	454445-32	87
G. Taylor	454445-32	454445-32	454445-32	87
H. H. Thomson	454445-32	454445-32	454445-32	87
H. T. Lockwood	454445-32	454445-32	454445-32	87
G. Taylor	454445-32	454445-32	454445-32	87
W. B. Murray	454445-32	454445-32	454445-32	87
H. Simon	454445-32	454445-32	454445-32	87
L. H. Best	454445-32	454445-32	454445-32	87
J. S. Case	454445-32	454445-32	454445-32	87
J. S. Luther	454445-32	454445-32	454445-32	87
C. H. Anderson	454445-32	454445-32	454445-32	87
P. Keen	454445-32	454445-32	454445-32	87
E. W. Hatfield	454445-32	454445-32	454445-32	87
C. H. Osmond	454445-32	454445-32	454445-32	87
T. R. Murphy	454445-32	454445-32	454445-32	87
A. H. Buck	454445-32	454445-32	454445-32	87

"1 point allowance for 50 caliber rifle for end of prizes, a 200 yards match, 4 shots per man. This odd contest resulted as follows:—

M. P. Ross	454445-32	J. E. Brown	444445-32
J. W. Farrow	454445-32	D. L. Dodor	444445-32
Jas. Larned	454445-31	J. H. Brown	454444-32
A. H. Cobb	454445-32	J. H. Sullivan	434445-32
J. P. Crutcher	454445-32	N. O. Donnell	354444-32
C. W. Homan	454445-32	J. H. Homan	454445-32
J. L. Paulding	454445-32	C. Homan	434445-32
H. H. Nichols	454445-32	L. H. Greve	444443-32
P. Ward	454445-32	J. H. Thorne	354444-32
J. H. Baker	454445-32	G. A. Gainer	454445-32
C. S. Matthey	454445-32	W. Robertson	454443-32
J. S. Case	455444-32	N. D. Ward	454445-32
C. P. Tolley	454445-32		
J. W. Toad, E. C. Terry, J. N. Frye, E. Preston, C. Heizman, N. E. Fitch, C. A. Krebs, Wm. Ennis, E. Griffin, E. O. Shakespear, R. H. Wilson, J. G. Zimmerman, E. D. Marsh, W. H. Atkinson, L. E. H			

After the corps shoot the judges shot for a handsome medal presented by Major Aery, which was won by Mr. Henry D. Rottmann. The badge presented by FOREST AND STREAM, for the best shot that had never won a prize, was won by the originator of the corps Ex-Capt. Herman D. Busch. Capt. Busch organized the N. Y. Schuetzen Corps in 1857, and spent both time and money to make it a permanent organization, and most of the crack shots of the corps of to-day were taught how to shoot by Capt. Busch. The Captain is a good shot, and the only reason he has never won a prize before is because he never shot for one.

The pla presented by FOREST AND STREAM for the lady who caught the most fish in the fishing match could not be asked for owing to the bad weather on account of this the committee decided it should be bowled for, each lady being allowed three balls. The trophy was awarded to Mrs. Hilderman, who achieved a score of 23. Mrs. John Suhr, Mrs. Wendt and Mrs. Geo. Ort received smaller prizes.

The corps left for New York at 5 P.M., Wednesday, and arrived in the city much the better for the trip.

Major Aery and his assistants deserve great credit for the way they managed the festivities, and all united in giving three hearty cheers for Major Aery and the N. Y. Schuetzen Corps. NATIONAL RIFLE CLUB. —Twenty-third meet.—Smith Vernon, Sept. 7th and 8th. —Weather overcast, wind gusty and varying 4 to 30 days, from the line of firing.

"Order of the day, 50-tonners at 230 yards, position and rest unrestricted. Standard weight of rifle barrel 15 pounds, excess handicapped. A prize, *pro rata*, to each one of the best three of each string. A gold medal to wear and silver medal to keep to the best aggregate of the three strings.

Of the 17 competitors we give the respective scores of the winners, in inches, 8th and 16th, measured from center to center.

First string—D. A. Brown, Massachusetts, 10 1/2, first prize; John Williamson, New York, 14 0, second prize; H. J. Hutton, Vermont, 15 3 1/2, third prize. Second string—D. A. Brown, 10 0, first prize; J. Williamson, 10 5 1/2, second prize; W. D. Craft, New York, 11 0 1/2, third prize. Third string—C. F. Fletcher, Vermont, 12 6 1/2, first prize; D. A. Brown, 12 0 9, second prize; J. N. Madden, Vermont, 14 5 0, third prize.

Best aggregate—D. A. Brown, 32 7, 9 medals. Next meet at same place, last Tuesday of August, 1881. J. Williamson, President, and N. S. Brockway, Secretary, reflected.

Archery.

—Address all communications to "Forest and Stream Publishing Company, New York."

THE OHIO STATE ARCHERY ASSOCIATION.

SECOND ANNUAL TOURNAMENT.

THE second annual tournament of the Ohio State Archery Association took place at the Zoological Garden in Cincinnati on the 25th, 26th and 27th ult. The following clubs participated, Westwood Archery Club, of Westwood; Sagittarius, of Walnut Hills; College Hills, of College Hill; Waverly Club, of College Hill; Highland Archers, of Wyoming; Robin Hood Archers, of Dayton; Arden Archers, of Marietta; Glendale Archery Club, of Glendale; Merrie Bowmen of St. Clair, of Eaton; Mt. Auburn Archery Club, of Mt. Auburn; Auburn Archers, of Mt. Auburn.

The Toledo Archery Club, a member of the Association, was not present to take part in the tournament, but Mr. Smith, one of its members, came upon the scene just before the shooting was over and gave a special prize of five volumes of Ford's book. Seventy-two archers took part in the tournament—twenty-nine ladies and forty-three gentlemen. The record of last year's tournament shows that nine clubs took part, with fifty-three members. The interest in archery is looking up in the Buckeye State, as is shown by these figures. It was thought last year that the excitement over archery would be like the transient temperance movements which now and then sweep the Ohio Valley, of only short duration; but it seems now, that its coming was more like the dumb age, whose first appearance in this region was recorded long ago when John Cives Syames' first deeds came to stay.

The increased interest in archery after one of these public meetings is sufficient evidence of their beneficial effects. However badly one shoots at such a meeting, he comes away a better archer than he was when he went. Every one seems bent on detecting a bean in some fellow archer's eye, and is willing to now and then have a mote extracted from his own. The result is improvement on all sides and increased interest in the sport. There were just seventy-two persons, by actual count, who went away from the tournament with a fixed and firm determination to take a championship medal next year.

These cool, quiet days were characterized by an ease and certainty of movement quite in contrast with last year's shooting. It is evident that an entire change has taken place in the mode of shooting among Ohio archers. At the last tournament everyone had a style of his own. Some "hunched" others took "round-dances;" some swore aloud, others employed those quiet, deep and awful forms of profanity used when a stranger treas on your foot. This year's shooting was marked by a quiet moral tone which was refreshing, to say the least. It was the triumph of Ford's method of shooting. Everybody was trying to shoot according to Ford, and it was observable that the best shots were following his method. There is now no doubt but that the republication of Ford's book will create a complete revolution in archery practices in this State. "It was a manly act of that Toledo gentleman to republish Ford's book," remarked a member of a rural club during a slight lull in the shooting. (Sixteen footed arrows were extracted from the body of the fellow who was guilty of the above.)

It was evident, as was often remarked during the tournament, that something should be done to check the growing habit among archers of calling a gold, a bullseye. Anyone who has ever examined a bullseye knows that there is not the slightest resemblance between them and then the thing is not fair for the bullseye, for he has no chance of talking back. During the tournament a lady member of the Society for the Prevention of Cruelty to Animals, called me aside and asked me if I wouldn't use my influence in trying to stop this slander upon the poor bovine's ocular organ. I assured her that I would do my best (hence this notice), whereupon she gave me a tract entitled, "Straight is the gate, an arrow is the way," and departed. Her idea evidently was that all is not a bullseye that glitters.

I had intended, Mr. Editor, when I started out to give you as a kind of daily relish at this stage of my report, a slight description of the different colors worn by the gay dames and sprightly fellows. I intended to give you the most interesting and picturesque and at the same time touch upon the many-colored garments worn by our male archers. But I find that life is too short, and

further, I understand that Mr. Will H. Thompson, who was such a welcome guest at our tournament, is going to give you a description of our meeting. The aesthetic side of the affair I leave to him, knowing that his account will be replete with graceful allusions and adorned with the latest metaphors from the shores of the Wabash.

PUBLISHERS' DEPARTMENT.

OFFICE of the Industrial Era,
ALBANY, IOWA, May 28th, 1880.

To Whom It May Concern:—
I take pleasure in making the following statement: I have been afflicted with the disease of the kidneys for the past two years, and have tried numerous remedies with only partial and temporary relief. Warner's Safe Kidney and Liver Cure was recommended to me, and after taking it the pain and distress left me, and I am to-day feeling strong and well. I am perfectly satisfied that Warner's Safe Kidney and Liver Cure is the medicine needed, and can cheerfully recommend the others. G. W. STAMM.

I hereby certify that I have been a practicing physician for twenty-seven years, and for many chronic cases in my practice do recommend Warner's Safe Kidney and Liver Cure. It is upon my advice that G. W. Stamm, the Editor, obtained this valuable remedy. A. A. RAMSAY, M. D.

—The Holbird Shooting and Fishing Sales Uphegrove & McEllen, sole manufacturers, Valparaiso, Ind. Send for circular. "The Holbird Shooting Club," the best in the world.

—Schuyler & Duane have just received a large importation of the South guns, both of the Premier and lower grade. Mr. Wm. H. Scott, broker in the city at present, has left his own gun with the above house for examination or criticism.

—If you want to get good prices for game, and all kinds of farm products, write to Hallard, Branch & Co., 112 Broad street, New York City. See advertisement.

—Hobbs' Patent Wall Tent and Stove, recently used at Creedmoor, was highly commended by many of the army officers and others. The readiness with which one can pick up his traps and go into camp, even in bad weather, with perfect comfort, has secured for the device the highest praise of all who have used it. See advertisement.

Cricket.

INTERNATIONAL CRICKET.

UNITED STATES VS. CANADA.

TWENTY long years have sped since the cricketers of Canada have crossed the line to meet their American cousins in the field at England's national game, and great have been the changes in these two decades. Many of those that did battle then for their country's fame have sadly passed away, and the few that are left can do little else but look on, for the game is now courted both in America and the Dominion by much younger men, who are far better fitted to play the old game in its new way. The match was the ninth in the series of these famous international contests, but for the first time in the annals of cricket it was played under the auspices of the two associations which control the selection of the teams, each in its respective country. The result of this new practical test of choice was therefore watched with anxiety by those who have the interest of the game at heart, and the appearance of two thoroughly representative sides is a matter of congratulation to those who have carefully looked into the seeds of time and predicted that the grain would grow. The match was arranged to be played on Monday and Tuesday, Sept. 13th and 14th, on the grounds of the Germantown Cricket Club at Nicetown, Philadelphia, but no provision was made for playing the match out should the weather prove unfavorable. This was an omission which we trust to see rectified in the future, for it is extremely unsatisfactory to allow the conditions of a match of this importance to be so drawn up that the probability of a draw may even enter into the agreement. After traveling 500 miles no side wishes to be restricted as to time, and hereafter this match should be kept going until one team wins and one is beaten. Rain interfered with the play on the afternoon of the first day and caused two adjournments. As soon, therefore, as C. Newhall settled down, the next morning, to his cautious, patient, wary innings, it could be seen with half an eye that nothing but a draw would be the result, and all interest in the match was at an end. True, there was a little exciting flurry when the wickets of the Canadians began to tumble in their second innings, but for all that there was not time to get rid of eleven men, allowing for the prescribed intermission between the fall of each wicket. The management of the grounds and the match was in the hands of the Executive Committee of the Cricketers' Association of the United States, which is composed of the following gentlemen: Messrs. A. A. Outerbridge, Chairman; J. Hildway Moore, John P. Green, Lindley Haines and Daniel S. Newhall. We take pleasure in testifying that the arrangements were simply perfect, and the committee deserves the highest commendation for their untiring attention to the best interests of the game. The result of the match, the scene of so many international contests, was much dearer than it usually plays, and the pitch seemed to cut up more than it has done under similar conditions. The out-field was grand, and stakes and ropes marked the inner ring. These were the boundaries—three runs for under and four for over.

The attendance was not as large as we expected to see, but it was found that 2,700 persons were on the grounds the first day, and as many as 3,000 the second. But although the audience was small it was an appreciative one, showing that Philadelphia's favorite out-door sport is well understood by the sight seeing public, and that the timely appearance of the game in this city is a benefit to the points of the game. The match from first to last was an astonishingly good one, the bowling and fielding having the call the first day, and the effective batting taking its turn the next. Summarizing the individual play during the whole match, we consider that Law showed himself to be the best all-round man; C. Newhall certainly performed best at the bat, with Ray a good second, and Kessler and Ray must take the palm for the finest fielding at point we have ever seen in America. Van Rensselaer was, as he always is, at home with the gloves, and Law's work at deep cover point was worth a journey over to see. Of the bowling, the figures of the bowlers are not moving. We can't remember Eberts well. For the United States, C. Newhall was by far the most difficult to play when the sun was up, for we were not carried away with the telling performances of Brewster and Law during the closing moments of the match. True, Law sent him in at a smacking pace, and Brewster kept well on the balls. But the setting sun caused the long shadows of the fine old forest trees that stand at the back of the ground to slowly creep out and spread like an outstretched hand between the wickets. In such light we defy any man to play, for as the ball would travel on its way it ran the gauntlet of the long strips of light and shadow. Gillean at times bowled grandly, with a peculiar way in the air that must have made his Yorkers anything but pleasant to meet. Ogden showed good promise, but outside of a fine piece of head work with Behan, which worked to a charm, D. Newhall was

not up to his usual work. The fields were placed excellently by both captains, and Capt. Kirchhoff had a good notion of making the most of his bowling talent.

THE GAME.

In charming weather, at 11 o'clock, the bell was rung to clear the grounds, and a few minutes later Capt. George Newhall was fortunate, in the choice, and elected to take the innings. The bowling was opened by Logan (medium round) from the lower end, followed by Gillean (fast round) club-house end. To Logan's bowling the two were placed as follows: Blake, at the wicket; Smith, straight-drive; Ray, point; Gamble, cover-point; Godfrey, long-off; Kirchhoff, short-leg; Gillean, slip; Ogden, long-leg; Behan, on-drive; Totten, long-slip, and Trousdale, long-on. To Gillean, Logan took slip; Smith came in to long-stop; Ogden to long off; Godfrey fell back to long-leg, and Behan to long-slip. Although there were frequent changes, these positions were adhered to in this innings. G. and D. Newhall went first to the wickets, and the former hit Logan's third ball to the boundary at leg for three, he then got Gillean's first ball to leg for three, and D. Newhall drove him to long-on for a single. On the next ball G. Newhall put one to square-leg, which Kirchhoff accented—7, 1, 6. Law joined D. Newhall and the latter played an over-pitched ball from Logan on his wicket—7, 2, 1.

This was a bad beginning for the United States, so Robert Newhall, Philadelphia's favorite bat, was sent in to join Law. Gillean's next over yielded 4 runs, Law cutting him sharply for 1 and R. Newhall hitting him to the off for 3. In Logan's next over G. Newhall's off stump was removed by a backshot—1, 3, 3. R. Hargrave partnered Law, who cut Gillean for a single, and the last corner slipped him for 2's. Logan bowled his third maiden—he was dead on the spot and bowling magnificently—and Gillean, after being cut for a single by R. Hargrave, gave Law's stumps two close shaves. Logan's fifth over yielded 2 runs, each batsman getting him to leg for a single. Gillean sent down a maiden, and R. Hargrave in Logan's next slipped him for 2. Gillean followed with another maiden. Both batsmen were now playing steadily, and 4 runs were the result of Logan's seventh over. In Gillean's seventh over each player secured a single, and Ogden (fast round) took the ball at Logan's end. Hargrave, after playing his first two balls, hit the third ball to the boundary, at square leg for 3. Gamble (slow round) then took Gillean's end, with the total 32, but the slows were too much for R. Hargrave, for he lifted one to Gillean at deep long on and retired with a score of 16 made up of three 3's and two 2's and singles—32, 4, 16. Kessler joined Law only to be clean bowled by Ogden, the first ball—32, 5, 0. Thayer, the pet of the Merion Club, came next, and almost at once gave Ray at point a one-handed cut of the same bowler, which was nicely taken—32, 6, 0. Brewster, the eighth man, faced the redoubtable Law, who had been defending his wicket obstinately. Gamble, second over, yielded a single to Law, and after he got Ogden to mid-on on a hard knock, Brewster cut him splendidly for 2. Gamble's next over was prolific of 4 runs, Law hitting him hard to the on for two 2's. In Ogden's fourth over Brewster placed him nicely to the on for a single. With the score of 41 Logan took Gamble's end and Brewster cut his first ball finely for 2 and another for a single. Law then added a single on the on, and Brewster snicked him to leg for 1. Ogden was then driven for two singles, one by each batsman, and Gillean resumed at Logan's end. On the first ball the batsman balked on a short run and Law was easily run out. His innings of 14 was a most excellent exhibition of sound cricket: it was composed of two 2's and singles, after this he hit Law for the bat—49, 7, 14. 2. Hargrave, who was at the wicket at once hit Ogden splendidly to leg for 3, and Brewster cut him for 1. The first ball from Gillean clean bowled T. Hargrave—54, 8, 3—and Clark joined Brewster, who was batting both carefully and well. Clark, however, was not destined to improve the disastrous look of the innings, for Gillean got in on his leg stump on his second ball—54, 9, 0. Charles Newhall was Brewster's fourth partner. Ogden's next over was a maiden, but in Gillean's next a leg-bye was run off C. Newhall's legs, and Brewster placed him to the off for a single. Brewster then hit Ogden to the ropes at leg for 3, and C. Newhall drove him for a single. C. Newhall then brought down the house by a hard drive to the off for 4, off Gillean. The fielding of the Canadians was superb, particularly at this portion of the innings. When 64 runs were up Ogden handled the ball to Logan, who sent down a maiden to Brewster. C. Newhall then drove Gillean to the off for a single, but Brewster on the next ball was bowled off his pad. His score of 15 was beautifully made; it contained one 3, three 2's and singles—65, 10, 15. Van Rensselaer joined C. Newhall and at once cut Logan for 2, being badly fumbled by Gamble. Gillean put down a maiden, and after each batsman had cut Logan for a single, Logan beat Van Rensselaer completely and the side was now 70 runs, and Gillean, leading at 1 o'clock, leaving C. Newhall at the wicket. The fielding of the official score sounding a tap-bell after every five balls were bowled. This saved the umpires the trouble of counting the balls and made the overs accurate.

The game was resumed at 1:20 P.M., with Totten and Logan at the wickets to do battle for Canada, faced by the bowling of C. Newhall (fast round), club house, and D. Newhall (medium round), lower end. The following are the positions at the start: For C. A. Newhall, bowling; D. Newhall, short slip; Thayer, extra mid-off; R. Newhall, third man; R. Hargrave, mid-off; Clark, long-slip; Brewster, mid-on; Kessler, point; C. Newhall, short-slip; Gillean, long-slip; Gamble, cover-point; R. Hargrave, Van Rensselaer, wicket-keeper. For D. S. Newhall: C. A. Newhall, short slip; Law, long-leg square; G. Newhall, cover, point; Thayer, short-leg; Clark, behind the bowler; R. Newhall, long-on; and R. Hargrave, long-on square—the remainder of the team crossing over. Totten, who is left-handed, drew first blood by cutting the fast bowler for a single, and in the next over cut D. Newhall for two 2's, and drove him to the off for 1 (one short run). C. Newhall's next three overs yielded two runs, and D. Newhall sent down three maidens. In C. Newhall's fifth over Totten was magnificently caught by Kessler at point on a very hard shot, a wonderful piece of cricket, and applauded to the echo—7, 1, 6. Smith joined Logan. The score stood at 8, when there was an adjournment for dinner at 2 P.M. On continuing at 2:45 P.M., C. Newhall sent down his fifth successive maiden. Smith, in D. Newhall's eighth over, hit him cleanly to leg for 1, but lost his leg stump to a ripper from C. Newhall—8, 2, 1. Gamble joined Logan, and the bowling of the two brothers was dead on the spot, 8 maidens following. In D. Newhall's twelfth over, Gamble got hold of a slow one and sent it spinning to square leg for 3, but C. Newhall avenged his brother by bowling Gamble for 1, and then hit Logan for a single. Gillean, after playing off his legs—18, 3, 3. Totten, who was at the wicket, hit Gillean for 1, and D. Newhall to deep square leg for 3, but was sharply caught behind the wicket by Van Rensselaer off C. Newhall on the second ball of the next over—16, 4, 3. Behan, who is considered one of the most-likely-to-score bats of the Dominion, joined Trousdale, but when the score had been increased to 20, a violent rainstorm broke over the grounds and put a sud-

Answers to Correspondents.

No notice taken of Anonymous Communications.

G. C. P., Rye, N. Y.—See our advertising columns. All dealers have second-hand guns.

L. B., Brooklyn, E. D.—Robins may be shot in this State during the months of October, November and December.

HUNT.—Mr. F. M. Wheeler is master of the Essex County Hunt. You can address him at Montclair, Essex County, N. J.

G. A. F., Canandaigua, N. Y.—Inclosed please find sample of grain which we suppose to be wild rice. Can you tell us if it is such. Ans. Yes.

G. F. H., White Sulphur Springs.—Letter mailed to you at the springs. Address "Gordon," this office, and your letter will be forwarded to advertiser.

Subscribers, Cincinnati, Ohio.—1. Does the new "Greener" Trap or Club Gun have rebounding locks or not? 2. Can either metal or paper shells be used in it? 3. 1. Rebounding locks. 2. Either.

W. P. B., Lynn, Mass.—For close shooting at forty yards which gun will prove best, a 32in. 16-gauge, or a 30in. 10-gauge. Both guns to be open (not choked) and use one ounce of shot (No. 5 or 8). Ans. The 16-bore gun will shoot closest if everything is equal.

E. F. H., Jersey City, N. J.—1. What weight bore and length of barrels would you advise for a general gun? 2. Do you consider the 12-bore gun a good one? 3. What is the lowest figure I can get for a gun for that would do good work? Ans. 1. Eight pounds, 10-gauge, 30in. 2. Yes. 3. About fifty dollars will procure you a safe gun.

HALL, Syracuse, N. Y.—What size of a gun would you advise one purchasing for general shooting—10, or 12-bore. I want a gun that I can shoot in trap and field and duck? Some say a 10 and others 12. Please advise. Ans. It is much a matter of fancy. We would recommend No. 10. The firm you mention stand well with the trade.

C. Kent County, N. Y.—I wish to send a dozen live quail to England. Will you kindly inform me how I can proceed, and what the probable cost will be? If you cannot give the desired information, could you instruct me who to write to that could do so? Ans. Write to E. B. Goldsmith, 38 Wall Street, New York. He will give you all the information desired.

S. L. A., Second.—The worms you described are pin worms. Injections of salt and water will do good, but we suggest that you give injections of turpentine, small desertspsoonful mixed with warm milk. This will rid her of the worms, which probably cause a sympathetic irritation of the bladder, and will prevent the trouble of her frequent desire to pass water.

T. J. D., Alabama.—I have a mare that is gun-shy and as she is almost perfect in every other respect, can you suggest a remedy for her fault? Ans. In some cavalry regiments the feeding time is denoted by the firing of a pistol. This soon changes a young horse's dread of the report into eager, joyous expectation. It is the visible animation of the old horses that so quickly reconciles the cavalry colt to the sound of the "feeding pistol." Fear and joy are feelings get more contagious in animals than in man. We can suggest no better mode of training.

C. M. S., Dunbarton, N.H.—1. Can you tell me where I can get a pair of 8-bore barrels? I wish to get the barrels, locks and action fitted together, but not finished. I can get 12 and 16-bore in Boston, but cannot find a pair of 8s. Would not an 8-bore give better pattern at long range than a 10, both being choked alike? Ans. 1. It is doubtful if you can get a pair without ordering them. We do not know of a pair in the city. 2. No better pattern.

J. K., New York City.—I have a pointer that has been sick for a long time; not knowing his disease until I discovered he had passed a part of a tape worm. Please advise a remedy. Ans. As the age of your dog is not given it is impossible to prescribe exact quantity, but if you will starve your dog twenty-four hours, then give from ten to thirty drops of oil of male fern, repeat dose half hour later, and follow with castor oil, you will, in all probability, produce the desired result.

J. W., Pittsburg, Pa.—I have an Irish setter dog, one year old. He is strong, lively and has a moderate appetite, nose cool and moist and gives good. Have fed cooked meat with some vegetables. At times he draws himself in about the kidneys and seems in pain, so much so that he howls; has had diarrhoea, but is over it and is somewhat costive now. Please prescribe for him. Ans. Your dog has occasional fits of colic. When the symptoms appear give desertspsoonful of castor oil with half teaspoonful of laudanum. Exercise in moderation and the food you have been feeding will bring your dog around in time.

FOREST AND STREAM,
A WEEKLY JOURNAL,
DEVOTED TO SHOOTING, THE KENNEL, THE RIFLE, ANGLING
AND OTHER FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, AND THE INFLUENCE IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUTDOOR RECREATION AND STUDY.

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Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention.
Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

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REVERSED WINGED FLIES.

Small to medium Trout, reversed wings \$1.50 Per Doz.
Large Maine " " 2.00 " "
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Any of the above flies tied with jungle cock shoulders and golden pheasant crest trails at 50cts. per dozen extra.

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ABBEY & IMBRIE,
Highest Quality Flies.

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ARCHER'S "DRAW AND LOOSE"

GIVES SLENDID SATISFACTION.—A HANDLE makes the DRAW much EASIER. Fingers never touch the string. A HAIR TRIGGER to loose instantly and smoothly. THE KEYS TO THE FINGERS and the EASE OF DRAW gives ACCURACY TO THE AIM. Liberal Discount to Clubs of Six or more. Send for circular. Address S. E. FRE NCH, Park Avenue Hotel, N. Y. City

B. F. NICHOLS & CO.,
SUCCESSORS TO
BOSTON SPLIT BAMBOO FISHING ROD CO.

36 Beach Street, Boston, Mass.,
MANUFACTURERS OF
FINE SPLIT BAMBOO
SALMON, BASS and TROUT
FLY and BAIT RODS
of best quality. Six strands from butt to tip
German silver mountings.
EVERY ROD WARRANTED.
Satisfaction guaranteed. Send stamp for price-list.

For Sale.

Wild Rice Seed for Sale.
\$2.00 PER BUSHEL.
CHA'S GILCHRIST,
Fishery Inspector, Port Hope, Ontario.

WILD RICE SEED for sale, 33 per bushel. Supply limited.
R. VALENTINE, Jacksonville, Wis.

GUN FOR SALE.—A NEW W. W. GREENE, treble wedge fast, top snap, extension rib, pistol grip, 12 gauge, 28in. cylinder bore, 7 1/2 lbs., 27 in. drop; 1 1/2 shot; patent forelock—a beautifully finished and excellent shooting gun, at a sacrifice, and for no fault. Address M. P. McKOON, Franklin, N. Y.

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FOR SALE—THAT LARGE FRAME HOTEL, formerly kept by STONE & BALANCE, with about twenty rooms and store attached; nearly new, situated within a few hundred yards of Van Slack's Landing, Currituck county, N. C., which is half a day's trip by steamer from Norfolk, and in close proximity to the famous ducking marshes of that section, so well known to all the sporting clubs of the North. This property cost about thirty-five hundred dollars, (\$3,500) but will be sold very low. Apply to
M. L. T. DAVIS & CO.,
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Buy their Shooting Suits of G. W. Simmons & Son, (Oak Hall, Boston), who are the makers of the Prize medal "Boston Shooting Suit," which is the very best that is made; never tears, or rips--has its seams sewed with silk and linen--and its buttons so securely fastened they never come off. If any one wants the proper outfit let him send to
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Breech-Loading Arms

DOUBLE GUNS.		Extra.
Twist.	Laminated.	
\$4.00.	\$4.00.	\$3.00

SINGLE GUNS.		Laminated.
Plain.	Twist.	
\$12.50.	\$19.50.	\$17.00

RIFLES.			
24 in.	26 in.	28 in.	
22 caliber.	24 "	26 "	\$21
24 "	26 "	28 "	\$21
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Extra for globe sights and varnished stock, \$3.
HUNTER'S PET RIFLES.
18 in. 20 in. 22 in. 24 in.
22, 32, 38 and 44 caliber. \$15 \$19 \$29 \$21

POCKET RIFLES.			
10 in.	12 in.	15 in.	18 in.
22, 32 caliber.	\$12.50	\$13.25	\$15 \$16.50

Light. Heavy.
\$20.00. \$22.00.

J. Stevens & Co. have nearly doubled the capacity of their works, and for several months have been obliged to run the factory at night to meet the increased demand; showing that the ROYALST AND BEST SHOOTING ARMS IN THE WORLD, when sold at such moderate prices, will force their way into favor without the aid of elaborate puffing or paid shooters. Send for illustrated price list to
CHARLES FOLSOM,
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Fire-Arms, Ammunition, and all Articles connected with the same, and sole Agent for
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ENABLES one to go into camp at any time with perfect comfort. Nothing is added to the bulk of the ordinary tent and poles, except a stove, weighing 8 lbs., easily carried by hand, instantly set up, and as readily taken down. No stovepipe to be adjusted, and no danger of burning the tent. The stove and fixtures are readily applied to any tent. Send for circular and reduced price list. WM. A. PERCIVAL, Flatbush, N.Y.

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PLEASURE, HEALTH, HAPPINESS.
Address BOX 97, CAMBRIDGE, Md. may13,80

FOR EXCHANGE.—An 8-gauge, 31-inch barrel, 12-pound, W. & C. Scott & Son breech-loader, with leather case, loading implements, 75 brass shells, 75 duck decoys. Will exchange for a 7 or 10 pound gun, reliable make. Address L. C. Lock Box 516, Poughkeepsie post office, N. Y. Sept-6-2t

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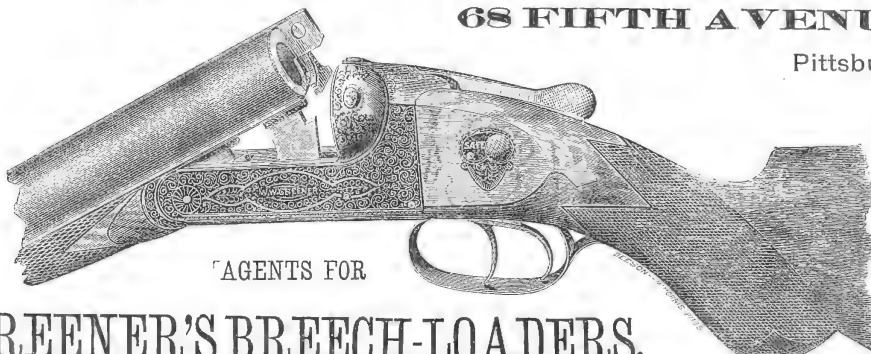
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J. Stevens & Co.
GENTLEMEN:—The little 38 caliber rifle you sent me on the 5th inst. is all right in every respect. In a trial held last Saturday on our 500 yard range I used it against the Wesson, Maynard, Henry, Sharp and Remington, and five of the Billings and four of the Williams muzzle loaders, and did not have to take the second place for any of them, although I was tied by one which has hitherto been the "boss." Yours truly,
H. W. LYPERD.

J. PALMER O'NEIL & CO.,

68 FIFTH AVENUE,

Pittsburgh, Pa.



AGENTS FOR

W. W. GREENER'S BREECH-LOADERS.

NOW IN STOCK, a full line of every grade, from his New \$85 Gun up to his Finest Hammerless Guns. It will pay you to send us a memorandum of such a gun as you want and GET OUR QUOTATIONS. Remember we will send you a gun subject to inspection and trial on receipt of remittance sufficient to pay express charges to your place and return. Some EXTRA BARGAINS IN FINE SECOND HAND GUNS now in stock—three Scott Premier quakies, two Westley Richards, two Williams & Powell, two W. W. Greener, one Doucail—all with hammers. SEND STAMP FOR CATALOGUE.

The Kennel.

WESTMINSTER KENNELS.

FOR SALE—THE FOLLOWING PUPS,

whelped July 24, 1880:—
Sensation ex Whiskey, one black and white dog, three liver and white dogs, three lemon and white bitches, one liver and white bitch. Prices from \$25 to \$40.

Also one liver and white dog, whelped July 23d, 1880, out of May by Sensation. Price \$35.
Also May, liver and white bitch, litter sister to champion Psyche. Price \$100.

SECRETARY W. K. C., 203 Broadway, Room 11. Sept. 23d.

FOR SALE AT A BARGAIN.—Two red Irish setter pups, both bitches, four months old, by champion Elcho, out of my red Irish setter Elsie. Temper, price, etc. Address T. P. MONTGOMERY, 7 South Third street, Harrisburg, Pa. Sept. 23d.

FOR SALE—CHEAP.—A fine litter of cocker spaniels; imported stock; color liver and white; very handsomely marked. CHAS. DENISON, Hartford, Conn. Sept. 23d.

FOR SALE.—A fine red Irish dog, one and a half years old; sire, imported Elcho; dam, imported Stella; in color a rich dark red; beautifully feathered. Price \$35. CHAS. DENISON, Hartford, Conn. Sept. 23d.

FOR SALE—CHEAP.—Some very fine red Irish setters; imported stock. CHAS. DENISON, Hartford, Conn. Sept. 23d.

FOR SALE—Royce: whelped March 15th, 1880, out of Roy and Nell. Roy out of a pair of dogs imported by D. M. Boyd. Nell out of the celebrated dogs Pilot and Doll. Address G. R. H., in care of W. H. BOND, York, Pa. Sept. 23d.

FOR SALE CHEAP.—Beautifully matched brace of Pointer dogs, Moody and Sanky. They are liver and white, intelligent, and fine workers in the field. For price and pedigree address C. E. LEWIS, Suspension Bridge, N. Y. Sept. 23d.

FOR SALE.—Fifteen Foxhounds, first-prize stock, the finest and best. Address, with stamp, L. M. WOODEN, Rochester, N. Y. Sept. 23d.

CHAMPION ELCHO-ROSE.—Gentleman desiring Irish setters, winners in the field or on the bench like Halsey, Elcho III., Syden, Lady Clare, Meg, etc., will please address, as below, for a few splendid puppies of the above stock. For price of a full grown puppy to address owner of ELCHO, Champlain, N. H.

FOR SALE.—3 English pointer pups, 10 weeks old. Address box 90, Apollo, Armstrong county, Pa. Sept. 23d.

A Grand Chance.

FOR SALE.—By champion Elcho, ex-champion Fly-Fly, a dog pup one year old; large, strong, and very intelligent; ready to break his skin. Address H. W. GAUSE, Sept. 23d. Wilmington, Del.

FOR SALE.—A thoroughbred pointer dog, answering to the name of Rover; price \$75. Liver color; all to one white stripe under chin and breast; well-trained on partridge and woodcock, and all kinds of game; also, will retrieve on water. Age, two years. Also, a foxhound slut, well-trained on rabbits. Price \$10. Sept. 23d. Apollo, Armstrong county, Pa.

LACHINE KENNELS—Flirt II. (all liver) color, litter sister to champion Cora, for sale at a low price. Puppies from Canada in a few weeks. GEO. D. MACDOUGALL, P. O. Box 1312, New York City. Sept. 23d.

TO EXCHANGE.—Beautiful young pointer bitch lass, by champion Sanford ex Hava (Champion flow-Manson's Queen), for something as good. Sensation stock preferred. Address S. W. PAUL, St. Louis, Mo. Sept. 23d.

FOR SALE.—My setter dog, Tip, for which I gave in exchange to Mr. W. H. Wheeler, of Milbury, Mass., a good, nearly new, \$75 Parker breech-loader. Price of dog, 3 cents, boxed and forwarded on receipt of price. JAMES WIGHT, Hockland, Maine. Sept. 23d.

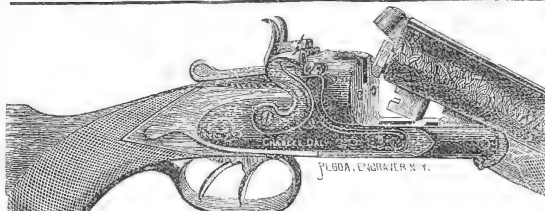
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Howard's Steel Head Shell—quality guaranteed. Price lower than any other.

The Kennel.

National American Kennel Club.

SECRETARY'S OFFICE, No. 51 Broad St., New York, Sept. 1st, 1880.

Field Trials of 1880,

FOR

SETTERS AND POINTERS,

AT FARMS OF COLONEL A. G. SLOO, Near Vincennes, Ind.

COMMENCING MONDAY, NOV. 15th, 1880.

Nov. 15th, Derby Stakes—For puppies born on and after April 1st, 1879. Closed with 18 Entries, \$5 forfeit; \$10 additional for starters; \$200 added money—\$150 to First; \$100 to Second; \$50 to Third, with forfeit money divided to winners in ratio with added money.

Nov. 16th, Free For All Stakes, \$500—\$250 to First; \$150 to Second; \$100 to Third; \$10 forfeit; \$10 additional for starters; to close Nov. 15th, 1880, at 8 o'clock, P. M.

Nov. 17th, Brace Stakes, \$250—\$150 to First; \$75 to Second; \$35 to Third; \$10 forfeit; \$10 additional for starters; to close Nov. 16th, 1880, at 8 o'clock, P. M.

JUDGES.—Capt. Patrick Henry, of Clarksville, Tenn.; Theo. Morford, Esq., of Newton, N. J.; D. C. Burroughs, Esq., of Indianapolis, Ind.

CHARLES H. RAYMOND, President.
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BULLTERRIER AND BLACK AND

Tan Terrier Bitch and Pup For Sale.—The bullterrier dog, Zulu, two years old, of the highest pedigree, nearly related to champion Terquin, warranted free from vice and quiet in the street. Also black and tan terrier bitch, Kate, and a pup out of her, ten weeks old, by champion Salford, both from the kennels of Sir William Verker, Bart. Kate was first prize winner at Wigan, Eng. For particulars address FAN O'LEH, this office. Sept. 23d.

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EASTERN FIELD TRIALS CLUB,

At Robin's Island, Peconic Bay, Long Island, N. Y.

ON

Nov. 29 and 30, and Dec. 1, 2, 3 and 4.

OPEN TO THE WORLD.

ALL-AGED STAKES.

Open to all Setters and Pointers. Limited to 50 entries. First Prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25; forfeit, \$15.

PUPPY STAKES.

Open to all Pointers and Setters under 18 months of age. Limited to 25 entries. First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, \$15. Entrance fee, \$15; forfeit \$10.

NURSERY STAKES.

Open to all Setters and Pointers under 12 months of age. Limited to 15 entries. First prize, \$60; second prize, \$40; third prize, \$20. Entrance fee, \$10; forfeit, \$7.50.

BRACE STAKES.

Open to all Setters and Pointers. Five braces to run or prizes to be scaled. First prize, \$250; second prize, \$125; third prize, \$50. Entrance fee, \$25; forfeit, \$15.

CLUB STAKES.

Open to members of the Club only; dogs to be owned and hunted by the members making the entry. Prize, a hundred dollar piece of plate, to be selected by the winner. Entrance, 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace Stakes, and entries close on Nov. 18th. Entries will be received for the open stakes up to mid-day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.

P. O. BOX 374, NEW YORK CITY.

Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

BRANDYWINE KENNEL.—We have

now for sale a few English (Llewellyn) setters, ranging from 1 months to 1 year old. Also two very fine field dogs, 2 years old, both hunted last fall, one of which took second prize at St. Louis Dog Show last year. For full particulars, description, pedigrees, prices, etc., address ISAAC YEATSLY, Jr., Manager, P. O. Box 15, Cottesville, Pa. Sept. 23d.

CHAS. H. VAN VECHTEN.

FERRETS FOR SALE.

\$7 PER PAIR.
\$4 FOR SINGLE FEMALE.
\$3 FOR SINGLE MALE.

CHARLES H. VAN VECHTEN,
Victor, Ontario County, N. Y.
Sept. 23d.

GORDON SETTER PUPPIES.—FOR SALE,

six puppies by Dr. Allen's Glen, out of the Belle, now eight weeks old, and remarkably handsome. Glen won in the brace stakes at the Eastern Field Trials, and Belle is an imported bitch from the kennels of S. E. Richardson, Esq., winner of two first prizes in Ireland. For price, pedigree and particulars, apply to J. W. Forest and Stream office. Sept. 23d.

FOR SALE.—An extra good, thoroughbred,

well-broken Setter. Also a superior-broken Pointer. Address HORACE SMITH, 31 Park row, N. Y. Sept. 23d.

I WILL TRAIN A FEW FINE YOUNG

dogs for partridge, woodcock and quail. Plenty of birds. ISAAC M. BRADLEY, Eldred, Sullivan County, N. Y. Sept. 23d.

Ammunition, Etc.

ORANGE SPORTING
POWDER.

Orange Lightning.
Orange Ducking.
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Creedmoor.

ELECTRIC BLASTING APPARATUS.

Send postal card for ILLUSTRATED PAMPHLET, showing SIZES of GRAINS of POWDER. Furnished FREE.

LAFLIN & RAND POWDER CO.

No. 29 Murray Street, N. Y.

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DUPONT'S

Rifle, Sporting and Blasting Powder.
The most Popular Powder in Use.

DUPONT'S GUNPOWDER MILLS, established in 1805, have maintained their great reputation for seventy-eight years. Manufacture the following celebrated brands of Powder:

DUPONT'S DIAMOND GRAIN.
Nos. 1 (coarse) to 4 (fine), unequalled in strength, quickness, and cleanliness; adapted for Glass Ball and Pigeon Shooting.

DUPONT'S EAGLE DUCKING.
Nos. 1 (coarse) to 3 (fine), burning slowly, strong, and clean; great penetration; adapted for Glass Ball, Pigeon, Duck and other shooting.

DUPONT'S EAGLE RIFLE.
A quick, strong, and clean Powder, of very fine grain, for Pistol Shooting.

DUPONT'S RIFLE FG, "SEA SHOOTING,"
FFG and FFGG. The FG for Long Range Rifle Shooting, the FFG and FFGG for general use, burning strong and moist.

Sporting, Mining, Shipping and Blasting Powders.
Of all sizes and descriptions. Special grades for export. Cartridge, Musket, Cannon, Mortar and Mammoth Powder, U. S. Government standard. Powder manufactured to order of any required grain or proof. Agencies in all cities and principal towns throughout the United States. Represented by:

P. L. KNEELAND, 70 Wall Street, N. Y.
N. B.—Use none but DUPONT'S FG or FFG Powder for Long Range Shooting.

THE HAZARD POWDER COMPANY

MANUFACTURERS OF

GUNPOWDER.

Hazard's "Electric Powder."

Nos. 1 (fine) to 6 (coarse). Unsurpassed in point of strength and cleanliness. Packed in square canisters of one pound only.

Hazard's "American Sporting."

Nos. 1 (fine) to 6 (coarse). In 1 lb. canisters and 6 lb. kegs. A fine grain, quick and clean, for upland game shooting. Well adapted to shot guns.

Hazard's "Duck Shooting."

Nos. 1 (fine) to 5 (coarse). In 1 and 5 lb. canisters and 6 and 12 lb. kegs. Burns slowly and very clean, shooting remarkably close and with great penetration. For field, forest, or water shooting, it ranks any other brand, and it is equally serviceable for muzzle or breech loaders.

Hazard's "Kentucky Rifle."

FFG, FFG, and "Sea Shooting" FG in kegs of 26, 12, and 6 lb. and cans of 5 lbs. FFG is also packed in 1 and 1/2 lb. canisters. Burns strong and moist. The FFG and FFG are favorite brands for ordinary sporting, and the "Sea Shooting" FG is the standard Rifle Powder of the country.

Superior Mining and Blasting Powder.

GOVERNMENT CANNON AND MUSKET POWDER; also, SPECIAL GRADES FOR EXPORT, OF ANY REQUIRED GRAIN OR PROOF, MANUFACTURED TO ORDER.

The above can be had of dealers, or of the Company's Agents, in every prominent city, or wholesale at our office.

88 WALL STREET, NEW YORK.

McCUE BROTHERS,

HATTERS,

178 BROADWAY, NEW YORK.

OUR STYLES ARE CORRECT, and of the BEST QUALITY ONLY. We guarantee satisfaction. TRY US.

MOLLER'S KESWICH COD-LIVER OIL



Is perfectly pure. Pronounced the best by the highest medical authorities in the world. Given highest award at 12 World's Expositions, and at Paris, 1878. Sold by druggists, W. H. Schieffelin & Co., N. Y.

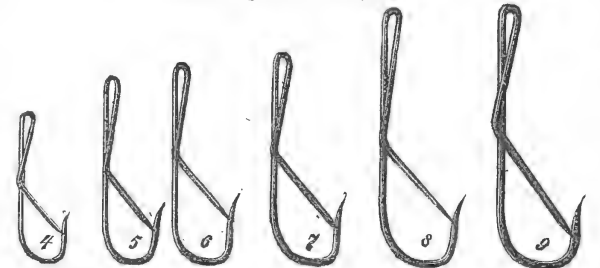
Miscellaneous Advertisements.

William Mills & Son,

7 Warren Street, New York.
Manufacturers and Sole Proprietors

AUL'S
Patent Barbless Fish-Hook.

Patented October 30th, 1877.

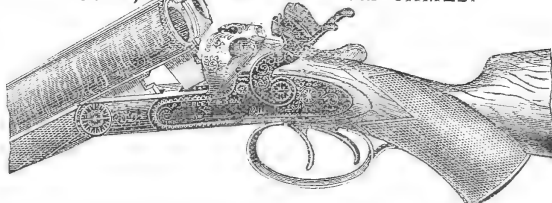


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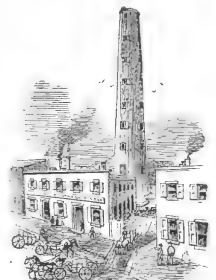
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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

[Entered According to Act of Congress, in the year 1873, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington]

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NEW YORK, THURSDAY, SEPT. 30, 1880.

Volume 15—No. 9.
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FOREST AND STREAM

NEW YORK, THURSDAY, SEPTEMBER 30, 1880.

HUNTING CARS.—During a recent visit to Chicago we were kindly allowed to make a thorough inspection of the hunting car Davy Crockett, owned by the Pullman Palace Car Company. The car is a full-sized palace car, with a kitchen on one end, with refrigerator, a large range and supplied with all the paraphernalia a first-class cook would need; next to the kitchen is a room for the stewards, with carving tables, etc., and so arranged that when the table is folded up two good berths are made for the occupants. Next are four full sections, two on either side of the car, then comes the sitting-room in the center of the car, with extension dining-table, which can also be used as a card-table for evening amusement. There are a dozen large easy chairs, all well arranged for comfort. Next are four more sections, which, with four berths that can be made up in the sitting room, gives good sleeping accommodation for twelve persons. In the other end of the car are kennels for eighteen dogs, nicely carpeted and in good order. A gun room, private locker, wash-room, etc. The car is well equipped with buckets for watering dogs, washing guns, minnow pails, and in fact every requisite for hunting or fishing. There are large refrigerators of the most approved pattern, for keeping game, underneath the car, and it may well be called a sportsman's club-house on wheels. The price for using the car is \$35 a day, equipped with a cook and two stewards. The car had just come in from a Western trip, and the companion car, "Isaac Walton," is now on the road. Special rates can be made for hauling the car over any road.

GAME AND FISH PROTECTORS OF NEW YORK.

A FEW weeks ago we noticed the passage of a bill by the New York Legislature authorizing the Governor to appoint eight persons, to be known as game and fish protectors, whose duty it should be to enforce the statutes for the preservation of the objects named, and to bring action against all persons found violating the laws relating thereto. These protectors were to hold office for the period of three years, and were to receive a salary of \$500, and traveling expenses not to exceed \$250. This bill was approved by the Governor, and was favorably commented upon by the press generally as the possible beginning of a new order of things creating paid officers, who had no share in the fines or interest further than to do their duties, which, if done conscientiously and without fear, would be a stride in advance of anything yet proposed to advance the ends aimed at.

In our opinion, one fault in the bill, otherwise so carefully framed by Mr. John E. Develin, was that it did not provide for the proper distribution of these officers throughout the State, but left them to be selected at large, which might probably have resulted in their all being appointed from one county had there been political pressure enough in one direction; and as the salary is not large enough to enable a man of the right sort to devote his whole time to it, it is evident that his location becomes a matter of primary importance. The following are the persons appointed and their places of residence, or address:—

S. V. R. Brayton, 59 Division street, Albany, N. Y.
John Jessup, Hudson, Columbia County.
Sylvester J. Palmer, Indian Lake, Hamilton County.
John Liberty, Elizabethtown, Essex County.
Daniel B. Horton, Ithaca, Tompkins County.
G. M. Schwartz, Rochester, Monroe County.
William P. Dodge, Prospect, Oneida County.
John I. Collett, Cobleskill, Schoharie County.

This distribution will strike the student of game protection as a very poor one, leaving the markets of New York and the whole of Long Island, the home of the poacher and trout thief, wholly alone, with no nearer protector than Hudson, Columbia County. Albany and Schoharie counties, adjoining each other, each have a protector, and there are not two counties in the State which are as poor in game and fish. Hamilton and Essex, two adjoining counties in the wilderness, have each one, and while there is game and fish in plenty in them, the prospect of accomplishing much in the way of protecting by this means is not great while the market is open. We believe in closing the market, and the poacher's occupation is gone. The few trout or deer killed out of season by persons living in the woods amount to nothing besides those slaughtered by the market shooter who forestalls the season, if indeed it is desirable to prosecute the guide or woodsman who kills merely for his own wants. Destroy the market, and the inducement to violate the law is destroyed. New York City is the great market, and if two protectors had been stationed in it they would have accomplished as much as it is possible for the other six to do; their known presence would be a check upon dealers disposed to turn a dollar by an illegal sale.

Few people in the interior of the State have an idea of the great amount of shooting done on Long Island, or of its fishing interests, while all who are conversant with the markets are aware that the new ten inch lobster and half pound striped bass laws need constant supervision as well as trout, woodcock, snipe, etc., with which the island abounds; but it is the curse of the service that all appointments "with money in" are made by politicians for political ends, and the man with the best backing, politically, gets the place. We know nothing of the character of those appointed, and hope they may be made of the proper stuff to do their duties without fear or favor, but, as we have said, their geographical distribution is about as bad as it could be, Rochester being the only market of any importance which needs watching, that point being one of importance, as well as the fisheries near by; but Buffalo is also an important district,

with Rochester as the nearest station of a protector.

We will watch closely the result of the new law, and hope to find much in it to approve, as under the old system the clause giving half the fines to the informer laid the latter under the suspicion of mercenary motives, a thing most distasteful to many, who will now have no hesitation in calling the attention of the nearest protector to any violations of the law which he, as a salaried officer, is bound to take cognizance of and prosecute.

WORK ON THE SUSPENSION BRIDGE.

ONE of the most wonderful structures of mechanism has recently been accomplished on the Suspension Bridge at Niagara Falls, which was opened for traffic in 1855, having a span 821 feet 4 inches from center to center of the tower on either side of the river. It was at that time considered a marvelous piece of work, and many doubts were entertained as to the durability or permanence of the structure. During its immense length it had a railway for trains, bound West or East, on the top of the structure, and a good roadway for carriages, wagons, etc., underneath. The bridge was a suspension bridge, and the truss system was purely a combination of wood and iron, and has been in constant use for the past twenty-five years without any accident or breakage of consequence. In March, of 1877, there was an inspection of the four cables, each measuring 10 inches in diameter and containing 3,640 wires, the diameter of each wire being a scant No. 9 gauge. The inspection first made was at the strands where they join the anchor chains, which were imbedded in masonry at either end, and a few of the outside wires were found to be corroded. The corroded wires were cut out at once, and new wires supplied in their places. The portion of the cables where they passed over the towers were found intact.

The commission of engineers making this examination reported that the cables were sound, but that in their opinion the anchor chains were not as strong as the cables, and advised the reinforcement of anchorages and chains. The following fall the work of the reinforcement was commenced, and finished the following year. The new chains were connected to the cable and a permanent stress of 1,000 tons applied to each end of the bridge, relieving the old anchorage of that amount. The Board of Directors, in March, 1879, decided to renew the truss system with iron and steel. The contract was let to the Pittsburg Bridge Co. to furnish the metal upon the plans offered and adopted by Mr. L. L. Buck, of Washington, D. C., who has the entire charge of the work. The delivery of the material began in September, 1879, and ended in April, 1880. The erection of the works began on the 29th of May, 1880, and will be completed by Sept. 15th, 1880. Thanks to skillful engineering on Mr. Buck's part of the programme, the work has gone on very successfully, without any obstruction to passenger trains, and hardly a vestige of the old woodwork of the bridge remains. No one who has crossed the bridge knows of the changes, but they have been made quietly and systematically.

The woodwork removed relieves the bridge of at least 100 tons in weight; aside from that, it largely increases the carrying capacity, as well as the safety of the bridge, by giving a uniform strength unsurpassed, as well as a structure that can be viewed with pride by any American citizen. The bridge, when completed, will be painted a pure white, and look more like a cobweb than a structure that will carry thousands of tons.

DR. HENSHALL.—Dr. J. A. Henshall has removed from Cynthia, Ky., to Cincinnati, Ohio, where his address hereafter will be, No. 100 West Seventh street.

PHILADELPHIA KENNEL CLUB.—Early in the season of next year the Philadelphia Kennel Club proposes to hold its second Bench Show of dogs. The exhibition will be held in the Permanent Exhibition Building, at West Philadelphia, and, in connection with the show, colley and water trials are being talked of.

EVADING DETONATION.

UNITED STATES CIRCUIT COURT.—New York, Feb. 10th, 1880.—Before John A. Shields, United States Commissioner Southern District of New York. Deposition of Carl Dittmar, of Birmingham, N. Y., who, being first duly sworn, deposes and states, in answer to Cross Question 834:—

"My gunpowder, when I first made it, had the same tendency as nitro-glycerine powder. I burst most all the guns at first, when I began to introduce it. It was JUST THE SAME AS IF I WOULD USE NITRO-GLYCERINE POWDER. Hence it now says that it is toned down, and don't burst any more guns."

THE "Dittmar Sporting Powder" is a nitro-cellulose product. As such it may explode in either one of two ways, by simple ignition, like gunpowder, or by detonation, like nitro-glycerine. It has been on the market for five years. During that period, in addition to continuously advertising it to be safer than the ordinary black gunpowder, the manufacturers have concealed its true character, and when others alleged that it did possess this nature, they have flatly denied or evaded the assertion.

In the course of our exhaustive discussion of this subject last week, after having shown that the product could properly be classed only among those explosives which may under certain conditions detonate, we said that the correctness of this classification had previously been three times evaded. We should have said ten times; and we might have added further that some of these evasions in the form of advertisements were repeated week after week.

That the readers of the FOREST AND STREAM may fully appreciate that our statements in respect to this are well founded, we have been at some pains to review the history of the powder with reference to this particular point, and we add to-day another chapter to that full discussion of this subject which we proposed to ourselves at the outset of our task. In the present paper we shall attempt only to show how the charge that the "Dittmar Sporting Powder" should properly be classed among the detonating compounds, was evaded and denied.

The first suggestion that the Dittmar powder should be classed among the detonating compounds was made as early as 1875:—

FOREST AND STREAM, Vol. IV., page 255, June 10th, 1875. "A Subscriber" says: "The proper name for this powder is gunwood, it being in its nature the same as gun-cotton, prepared in the same manner, only reduced to some extent by washing with alcohol, which has the effect, if left long enough to soak, of totally destroying its effective force. The gun-wood, as prepared and sold to consumers, is highly dangerous to life and limb," etc., etc.

The reply to this consisted of both denial and evasion:—

FOREST AND STREAM, Vol. IV., page 315, June 24th, 1875. Letter from Carl Dittmar says (italics his own):—"The statements of 'Subscriber' in your issue of 10th of June in regard to my new powder are erroneous. I do not make such powder as he describes. He must have confused my new article with the English 'wood-powder,' from which mine differs essentially. I do not use alcohol in its manufacture. If he will burn some of it he will find that it is very different from gun-cotton, and that it burns very much slower than black powder. It works in the gun about the same as black powder."

He might have added, for that matter, that nitro-glycerine burns slower than black gunpowder and slower than his own compound. It would not follow, however, that same as black powder; nor was it true that the Dittmar nitro-cellulose worked as black gunpowder.

FOREST AND STREAM, Vol. V., page 72, Sept. 9th, 1875. A letter is republished, written by "Glean," which asserts that the Dittmar powder probably belongs among the explosives, which are rending and shattering. To this an appended note says that Mr. Dittmar has replied:—

"With regard to the composition of the powder, he declares most positively that no substance such as chlorate of potash or nitro-glycerine enters into its composition, nor will he use any picric acid combination, or any kind of fulminate. This can be ascertained by analysis. It contains all the ingredients of Schultze powder, with the addition of starch, and he argues that his powder is absolutely safer than that preparation. If there is any danger in using his powder not inherent in the black, he desires to know it, and will be most grateful to any gentleman who will convince him of the fact."

The proffered gratitude was never exercised. The manufacturer of the powder, already knowing full well and better than anyone else the peculiar danger of his nitro-cellulose product, could not be "convinced" of it by another.

FOREST AND STREAM, Vol. VI., page 91, March 16th, 1876.—Letter from Carl Dittmar says: "I must again say that my powder is not a 'wood powder,' as it is entirely different in its composition. I use partly paper pulp, which may not be of wood at all; but I use so many other ingredients besides that the pulp is but a small portion of the whole, and it is not only different in composition, but also in properties, from the real 'wood powders.' I was contented with the manufacture of Schultze powder sixteen years

ago, and I could see at that time that it would never supersede the old powder, and I have worked ever since to invent an entirely new powder which will do what Schultze powder never can."

Turning now to the files of the ROD AND GUN we shall find the same story there:—

ROD AND GUN, Vol. VI., page 274, Aug. 1th, 1875. "Ex-Gun-maker" says: "The ingredients of which this powder is composed are generally understood by experts to consist of an infinitesimal amount of nitro-glycerine and gun-cotton, toned down with sugar, etc."

The reply to this contained the "pledge" already quoted:—

ROD AND GUN, Vol. VI., page 280, Aug. 11th, 1875. "I pledge my word of honor that I never sent, and never will send, powder for sporting purposes which should have the slightest trace of nitro-glycerine in its composition."

On page 358 of the same volume will be found a letter from Mr. J. W. Long, suggesting that in very many respects Dittmar's powder is strikingly similar to gun-cotton. The reply evades the charge in the same manner as already quoted from the FOREST AND STREAM, namely, by diverting attention away from the explosion of the two compounds under confinement and to their combustion in the open air:—

ROD AND GUN, Vol. VI., page 387, Sept. 25th, 1875. Letter from Carl Dittmar:—"He compares my powder with gun-cotton, but he will find a great difference between both when he burns them outside the gun, when my powder will burn very slow, with much residuum, while gun-cotton will flash like lightning and leave no residuum."

"Medicus," writing from Boston in the interest of the powder, winds up a long article by piously observing that our immunity from accident is due more "to the merciful interposition of Providence and the strength of our guns than to any care of our own;" the inference clearly being that it is just as easy for Providence to protect us from a detonating, nitro-cellulose compound as from the common black powder.

But Mr. Long's letters show that he knew what he was talking about, and he reiterated his charge (Vol. VII., page 73, Oct. 30th, 1875) that the Dittmar powder was analogous to gun-cotton, and said that he would fear to stand near a man shooting it. To this, one form of reply was a letter (Vol. VII., page 98, Nov. 13th, 1875) from Dittmar, Jr., a boy twelve years old, who thinks that if Mr. Long fears to stand near a man shooting the powder, perhaps he will not fear to stand near a boy shooting it, etc.

The other mode of reply was what is aptly termed "mud-throwing." There are two varieties of mud-throwing. One is intended, like the ink of the cuttlefish, to blind, the other to defile. Both were employed here. "Medicus" being closely pursued by the clear and logical writing of Mr. Long, had already written whole columns of blind and meaningless chemistry vaporing, and then finding that ineffectual, he adopted the other line, and judiciously turned the discussion into a personal controversy. This kind of mud-throwing, which smirches a man's character, is usually efficient to divert attention from the real merits of any discussion. It was efficient in this case, and afterwards it was adopted with another.

Mr. A. G. Dole, in the course of a long communication about the powder, said:—

ROD AND GUN, Vol. IX., page 230, Feb. 10th, 1877.—"I will designate these modern powders as acid powders, and here are the names of several of them, viz., Duallin, Giant, Rend-rock, Vulcan, Dynamite, Gun-cotton, etc., and I here take the liberty to suggest whether the Dittmar may not properly be included in the same category."

ROD AND GUN, Vol. IX., page 375, Feb. 11th, 1877.—Letter from Carl Dittmar in reply to A. G. Dole: "My Sporting Powder has nothing familiar with Giant Powder, Rend-rock, Duallin, Vulcan, etc., which powders are only used for blasting purposes. If your correspondent had only looked at your advertising columns, or perused one of my circulars, he would have found that I warrant my powder not to contain ingredients like nitro-glycerine, chlorate of potash, etc. If he does not believe it, he can have it analyzed. I hope his comparing my Sporting Powder with Giant Powder, etc., is only from ignorance, not from a wish to frighten our brother sportsmen."

The advertisement, in the same issue, contained these words:—

"It is much safer than black powder, as it only explodes when well confined."

"The manufacturers guarantee that there are no ingredients like nitro-glycerine, chlorate of potash, or picric acid, or wood in its composition as some suppose. It cannot be exploded by concussion."

We have no inclination to conduct the reader further into the unsavory record of the controversy respecting the "Dittmar Sporting Powder." That record, is one of repeated and successful attempts, practiced for five years, to put the product upon the market, to induce men to use it and to keep them, while using it, in ignorance of its true nature.

That record ought now to be closed. Our discussion of the "Dittmar Sporting Powder" last week was simple, clear, complete and conclusive. It is unanswerable.

Next week we shall discuss further some of the peculiar properties of this dangerous compound as determined by our own experiments with it.

It is due to those concerned that we should here state our belief that some of the parties who have been prominently associated in the manufacture and sale of the "Dittmar Sporting Powder" were as wholly ignorant of what they were selling as the purchasers were of what

they were buying. We know that some of these gentlemen gained their first knowledge of the real character of the powder from the article in the last issue of this paper.

It is unnecessary to publish the letters of complaint received by some of the former firms engaged in the sale of this product.

The letters received by one company, we have been assured, were so numerous, so frequent and of so grave a nature that the recipients were filled with alarm by them, and actually passed sleepless hours of suspense lest the next morning's mail should bring reports of fatal accidents with the powder.

The standing explanations of these accidents given to the sellers and buyers alike were either that the gun was a poor one or that the "directions" had not been followed. Whether or not these explanations sufficed, in cases like the following, we are not informed:—

UTICA, N. Y., June 23th, 1879.

H. C. Squires, Esq., New York:—

Dear Sir: We have in our hands for collection a claim against you and the Dittmar Powder Co. for damages done to two guns owned by Mr. Jay C. Smith, of this city.

The injury consists in tearing to pieces a 3 pound 12 gauge Farris breech-loading shot gun of the value of \$150.

For seriously damaging a 10 pound 8 ounce Nichols & Lefever 11 L. shot gun, 10 gauge, to the extent of \$50. This happened in April last while snipe shooting.

The powder was bought of you about August, 1878, a five pound lot, you can find by reference to Mr. Smith's account on your books. The loading was done precisely as directed by you, except the powder was not tapped in the measure, hence the charge was not so large as you permit. The shells which did the mischief were loaded in October, 1878, and a number of the shells were used in full with safety. The remainder were laid away until April, when Mr. Smith, in company with a friend, went snipe shooting. The friend carried the 10 gauge and Mr. Smith the 12. The first snipe that rose was fired at by Mr. Smith, and immediately afterwards the friend fired both barrels from the 10 gauge. Mr. Smith's gun came from his shoulder, barrels in one hand, stock in the other. The right barrel was torn open at the breech a distance of three or four inches, and the shell went out the opening. The barrels were torn apart quite a distance from the breech. The breech piece was cracked and bent and both upper and lower fastenings broken off. The gun has left one barrel and two locks; everything else is ruined. The other gun had the fastenings broken and is strained.

Both these guns had previously held larger charges of both black and Dittmar powder newly loaded, and both have shot shells out of the same lot newly loaded.

You can give such attention to this as you deem advisable. We will begin suit on the 15th July unless the matter is arranged. Yours respectfully, SETON & MOSEHOUSE.

NOTE.—This foot note second column of page 147, last week, should have included the cross-questions and answers 550 and 551. In the last line of A. J. Parker's letter, page 144, for *sealing*, read *selling*.

DEVIL FISHES.—The great cephalopod, or giant-squid, which was caught on the Banks of Newfoundland in 1876 and sold to the New York Aquarium, is now traveling with W. C. Coup's circus through the Southern States, and letters have been received asking if it really is a genuine animal, if it ever was alive, etc. This scepticism, no doubt, arises from not only the extreme rarity of this giant species, but also to a lack of familiarity of the family to which it belongs.

The squids are used for bait for many fishes along the Atlantic coast, but are small, seldom exceeding ten inches in length, while the body of Coup's animal in life, before being shrunken with alcohol, was ten feet long, and its arms were thirty more, making an extreme length of forty feet, the largest one known to be found entire. Portions of arms have been thrown up by the sperm whale in its death flurry, which must have belonged to much larger individuals, thus proving that the greater depths of the ocean are inhabited by larger monsters of this sort than man has ever seen. We can assure our friends in the rural districts that Coup's "devil fish" is all that it claims to be, and is *not* made of rubber, leather or other material, but like "Topsy," it "grewed."

SHOOTING FOR A STAKE.—A cheaply printed dodger, thrust into the doorway of our office, announces that the Marion Rifle Club, of Marion, N. J., are to have a "grand rifle match" with the Greenville Schuetzen Corps, of Greenville, N. J., for \$500. Knowing nothing about these clubs, and caring to know less about organizations who would degrade rifle practice into a mere scramble for stakes, we should say that there was something bogus about the affair, and the closing announcement on the cheap dodger that tickets of admission could be had at the gate shows what might have been expected, that somebody is keeping a keen eye for the dimes and dollars of the gullible ones. There certainly was a misapprehension when the scribe of the cheap dodger said that "Creedmoor targets and rules to govern the match." The whole purpose and effort of the National Rifle Association rules has been to keep rifle practice clear of the slightest tinge of gambling, and had these speculative shots followed the Creedmoor rule they would have stricken out the "stake."

DEEP SEA DREDGING.—It is only within a very few years that deep sea dredging has been carried on to any very considerable extent, but in this short time it has given us some idea as to how wonderfully numerous and varied are the forms of life which inhabit these depths

where the temperature is arctic, and to which scarcely the faintest glimmer of light can penetrate. The operations of the Challenger, of our own Fish Commission, and of Prof. Alex Agassiz, have been most productive, and the results have been of such very great interest that the completed reports of the various expeditions are awaited with extreme anxiety.

A brief report from the French vessel Travailleur from which a series of dredgings were made last summer in the Bay of Biscay, has been made by Prof. A. Milne Edwards. He states that during the last two weeks of July the weather was very good, so much so that they were able to dredge twenty-four times, sometimes using two dredges at once. The greatest depth reached was 2,700 metres, about 1,500 fathoms, and the least was over 300 metres, or more than 166 fathoms. The collections made were large, and included most of the species already described by the naturalists of Norway, Sweden and England, besides many others hitherto unknown. It is stated that the fishes, nemertians and sponges will be reported upon by Mr. Naillat; the molluscs by M. Fischer; annelids, echinoderms and other zoöphytes by M. Marion; joraminifera by M. de Folin, and crustacea by M. A. Milne Edwards. M. Perier has made numerous thermometric observations, and will make analyses of the sea bottom.

The Sportsman Tourist.

TIM POND.

EUSTIS, Maine, Sept. 2d.

IN my note of last week I spoke of improvements made by Kennedy Smith since my first visit here, which was in 1878. There then was one log camp; now there are four log cabins and one kitchen cabin, well provided with comforts. Then one boat was in use; now seven of different sizes and patterns invite the attention of those who want the festive trout. Then, perhaps a dozen persons found their way to these waters for the year. But those who went then go each year now. During August the camp register shows that fifty-five gentlemen and five ladies sought this charming resort, to feast not alone upon the toothsome trout and game, but the almost matchless scenery and the health-giving ozone of the forest and mountain air. C. W. Smith and sons, with a friend, have been here for their second visit. Gentlemen all, whether casting the fly, seeking wary game, or if in the cabin or at the parlor of taste and refinement. And just here let me say that such men—call them sportsmen, or hard-worked business men seeking recreation—help the proprietor to establish a most desirable "public sentiment." The feeling that prevents persons from taking more trout or game than wanted for the table, prevents slaughter and returns to their watery home the small speckled unfortunates that are accidentally hooked. Kennedy Smith does not command this, but all receive the idea that he feels it, and it is strange how general is the sympathy and compliance. Not more fish are taken in the "season" than are spawned each year, for they seem as plenty as ever. But the question is, Can they be protected when the "law is on," and poachers "most do congregate" on the ice to fill their gaping sacks? The Fish Warden will see they are protected! And the law-breaker will be called on to pay "smart money" to the State. Not only this, but we are told the Fish Commissioners will supply large numbers of young trout to inhabit this pond of wonderful clear water, and trout of a flavor and size unequalled in the River region. A good work. A new era when such a resort becomes a place for "fish culture." Thanks to the man for the pioneer example. The man eager to care for sportsmen and the right regard for game is the one for the period. This one is enthusiastic, and promises more and larger fish in years to come. I notice a correspondent speaks of taking trout in Maine in October. The trout is the "ton." You must not think I am alone in my love for the sport and sweet waters of this region. Some have been here even more times than I have, and say, like me, they shall continue to come. Mount Bigelow, Abraham, Saddleback and Kennebec look just as lofty and grand as the first time we beheld them. The pure "medicinal spring" is just as sweet and healing. Post Master Pillsbury, Dr. Hills and ex-Mayor Pierce, of Biddeford, with a large company of friends, have engaged cabins to occupy about the 11th instant. They were here last year. I met some of them, enjoying the new made friendship camp. The Gaughey brothers, of Watlin, Mass., head a party of fine sportsmen. Of the number, James Beatty, George H. Cushman, and S. Adams have just been sent here to "spy out the land" and see if "reports be true." Beatty is said to do fine work on watches. He has fine tackle. I had the honor to inform him where to locate his boat for his first Tim Pond casts. Soon he found the trout meat business, for nice salmon-colored one, with those enchanting fins of dark and light shade and captured his "Montreal," and in due time was nearly landed. Shortly after, two were testing the merits of his rod, and Beatty showed he was five thousand dollars for this sheet of water! Again, he made a most skillful cast, all of his four flies on his leader were occupied by enamored trout. It was sport to see the antics at either end of the rod. The expletives from the reel end were numerous and comical. When at length the four were landed, two, I think, by the balance, weighed about a pound each. B. belowed, "I will give ten thousand dollars for this home of the festive denizens!" He went ashore in about two hours with twenty-seven as fine fish as one would wish to see. At once he sent back to the rest of his "brethren," "Come, for we have found the Promised Land." This must serve as a sample of the constant "good times" we had. Wish I could tell of one time, just at sunset, when the water fairly boiled with the swirl of frolicking fish for quite a distance around. Believe me, then and there was fun, as well as frolic. Such a sight I never saw before.

Mr. Abbott, the popular principal of the Little Blue

School, at Farmington, with his wife, two sons and some of their pupils, found rest and recreation here during the summer vacation. This is getting to be a home-like place. Mr. Smith has his gentle wife with him to assist in cooking, etc. The table is laid with well-cooked game, and has good variety. Partridges never were so plenty, and during the last two days have been brought to bag in large numbers. Yes, to us, certainly it is home-like; and there is a feeling of sadness as to-night we unstring our rods and prepare to leave to-morrow. We have traps set for bears that give plenty of evidence they are numerous. Others must take charge of these steel bear catchers. Their favorite places are thickly marked by the footprints of deer and cariboo. But the "call us home, and we leave them to the tender mercies of venison steak lovers. Till next year all these sports, all this grand scenery, good-bye.

MEAD'S HOTEL, KINGFIELD, Sept. 3d.

I must add a word of two surprises. First, I am surprised to find here one of the best hotels for sportsmen and seekers for recreation I have ever seen. The proprietor, Mr. W. Mead, is from Boston, and both he and his excellent and efficient wife know how to keep a hotel, and they do it personally. About thirty guests can be accommodated at one time. Paint, paper and furniture are neat and fresh; beds are clean and soft, and every attention is freely given. The kitchen and table are in charge of Mr. and Mrs. Mead, and would afford credit to a first-class city hotel. My second surprise here is to meet my friend Jared Goodrich, of Plainville, Conn., with a company of his "boys," on their way to Tim Pond. We voted the breakfast, including fresh trout and really juicy, tender steak, with all the "fixins," the best we had eaten in Maine. I write this in the interest of travelers like myself, not the hotel. Mr. Goodrich left Boston yesterday morning, arriving at Farmington about 5 P.M., and took the stage to this hotel last evening. This morning the stage takes him and his company to the farm house of Kennedy Smith, and I proceed to Farmington and Boston.

J. WARREN TUCK.

ALL AROUND NOTES.

ZANESVILLE, OHIO, Sept. 13th.

Editor Forest and Stream:—A few notes of observation during the close season from a sportsman who has been moving around in different localities may interest some of your readers. Game of all kinds in Virginia and North Carolina is unusually abundant. In fact, everywhere throughout my travels I have observed that it has been an exceedingly good breeding season. During the summer, while over my old hunting ground in Virginia, I saw more coveys of young quail than ever before; more, in fact, than one would suppose could subsist on the amount of ground. They could be seen in almost every dooryard and garden, and "Bob White" was heard in different parts of every field throughout the land, seemingly happy that dog and gun had for a time at least ceased to wage war upon them. To wit, the confidence of the poor persecuted birds place in human nature during their breeding season can but reach the heart of the most old-fashioned hunter. Wild turkeys have also had a favorable season, and many flocks of young ones may be seen feeding in the grain fields in the early morning or in the evening. I succeeded in catching one with the assistance of my dog, but the dog squeaked a little too hard, and so weakened its constitution that it only lived a few days. "Ole ears" are very abundant, but a wise provision of Providence has balanced matters by an equal plenty of their enemies, foxes and little "jiggers." Some friends of mine being anxious "to shoot something," we went down to Shinnecock Bay for snipe the latter part of August. I always had an idea that Lane's was the only place worth going to on the bay, but discovered my mistake. We found his place full; could not even feed us and lodge us out. Hungry and tired as we were we had to seek other food and shelter, which we at last found at the Foster house at Pond Quogue, where we were introduced to a family of five brothers all guided as gunners. "You pay your money and take your choice." The time and service of these worthy gentlemen, with their boat, decoys, etc., is valued at \$3 per day, but is very cheap at that. I assure you. Most of them, in the quietest and most noncommittal way in the world, will cheer you, and keep up your flagging hopes with an earnest belief that there will certainly be a "sou'wester" to-morrow. They never assert nor even hint such a thing, but their quiet manner gives such a belief, and thus make you happy. After looking upon these enthusiastic brothers for some time with my usual amount of suspicion of all professional guides, we engaged one, A. C. but I won't mention his name in full, as it might shock his modesty. I will only say that of all his class I have ever met he is the one that comes nearest my heart and fancy; quiet and unassuming, very good company and knowing enough, but not overpowering you with the weight of his knowledge. We did not have such shooting as we desired, as the wished-for "sou'wester" did not come until possibly a day or two after we left. We killed a few dowitchers and small yellow-legs. However, our trip was one of considerable pleasure, notwithstanding our bad luck. We kept our eyes and ears open, and like true philosophers learned all we could.

We were quite entertained one evening by a couple of lovers, young and proportionately sappy. I don't believe they were lovers of field sport, but of that beautiful sentiment that makes two hearts beat as one, when "in singleness of vision, beauty reigns supreme." They unconsciously seated themselves very close to us, and after the usual formula and several salutes customary on such occasions, she said, in the softest little whisper:—"George, don't you want another cigar?" He.—"No, my dear; I have smoked two." She.—"But, George, I do love to do things for you. I'll go out for you." Presently her hand somehow touched his, when she exclaimed:—"Why! George, how cold your hand is. Are you cold, dear? Let me warm your hand."

After warming his hand, and not being able to warm him up to the right degree, she asked him for the other hand to warm and put in somewhere in the lace on her breast, holding it tightly and securely in its warm nest with both of hers. George thawed, his disengaged arm

went round her waist, and he commenced to compliment her "points" individually and collectively, especially her "sweet and beautiful neck," when she exclaimed, "Why, George, do you know when we came out from bathing that horrid Miss—wanted to kiss me on the neck? But I told her she shouldn't do it, as that was private property. Only for you, George, dear, and no one else." A suspicious cough interrupted further billing and cooing, and next morning "private property" was an expression which seemed very apt on several occasions, much to the mystification of all the guests but two. Now all this sort of thing seemed quite funny to us poor, lone gunners. We don't exactly understand it, but take the liberty of asking your advice: How would you like to be in George's place, and what should we do if we ever get in such a fix?

To those who don't know of other places than Lane's, I would say, there is lots of accommodation at various houses at Pond Quogue, and I believe just as good ground. Plenty of shooting, if the wind is sou'west.

BEDFORD.

Natural History.

—Address all communications to "Forest and Stream Publishing Company, New York."

FOOD OF OWLS AND GARIPIKE.—Our friend Mr. R. O. Sweeny, of St. Paul, writes us that he has recently made some discoveries in regard to the food of the animals above mentioned—or, as Mr. Sweeny puts it, has made two discoveries in fish lore. One is that owls will eat fruit, and the other that garpike are fond of wasps. The food spoken of is eaten with relish by both bird and fish, and not especially because they are hungry, but because it is enjoyed.

Our correspondent has both owls and garpike in confinement, and has thus been able to study their tastes.

CALIFORNIA FISHES.—We have received advance sheets of proceedings of the United States National Museum containing "Notes on a collection of fishes from San Diego, California, by David S. Jordan, and Charles H. Gilbert." The authors spent the greater part of the month of January, 1880, in the collection and study of fishes at the point named, in the interests of the United States Fish Commission and obtained some specimens new to science as well as established the fact that many known species are found there. Fifty-seven nominal species are given, all from salt water, four of which are new. Also in the same is "a description of a new flounder (*Xystreus liolepis*) from Santa Catalina Island, California, by the same." Also, "description of a new ray (*Platyphina triseriata*) from the coast of California." "Description of a new species of 'rock cod' (*Sebastes serripis*) from the coast of California." "On the occurrence of *Cephaloscyllium laticeps* (Dumeril) Gill, on the coast of California." "On the oil-shark of Southern California (*Galeorhinus galeus*)," all by Jordan and Gilbert. "The surf smelt of the Northwest coast, and the method of taking them by the Quilchute Indians, west coast of Washington Territory," by James G. Swan. "Notes on sharks from the coast of California," and "on the generic relations of *Platyphina exasperata*," by Jordan and Gilbert. "Remarks on the species of the genus *Chirus* found in San Francisco market, including one hitherto undescribed; a "description of a new fish from Alaska (*Uranidea microrotoma*)," a "description of a new species of *Agonide* (*Brachyopsis verrucosus*), from its coast of California," and a "description of a new genus and some new species of California fishes (*Coosteus enigmaticus* and *Osmorus attenuatus*)," all by W. N. Lockington. Mr. C. A. White gives a "description of a very large fossil gastropod from the State of Puebla, Mexico," and Jordan and Gilbert give a "description of a new species of ray (*Raja stellulata*), from Monterey, California;" "descriptions of a new species of *Xiphister* and *Apodichthys* from Monterey, California;" "description of a new *Agonoid* fish (*Brachyopsis agosterus*), from Monterey, California," and a "description of a new flounder (*Hippoglossoides ecilis*), from the coast of California."

THE HEARING OF FISHES.—A letter from the late Prof. Agassiz, on the subject of the hearing of fishes, dated Nahant, Aug. 8th, 1855, containing the following:—"I hold it would be a blessing—I mean fortunate—for many an individual to hear as distinctly as most fishes do. That they do hear is not only to be inferred from the very complicated pair of ears they possess, but may be directly ascertained, as I have often done, by frightening them by noises under circumstances when they cannot at the same time see. What may mislead us with reference to fishes having that organ of sense is the fact that, though the external ear is very perfect, they have no tympanum nor external auditive conch. But, as hearing consists in the perception of sonorous vibrations, these may strike the head and produce the sensation of a sound without passing through the auditive conch, as in the case of deafness, when people open the mouth to perceive sounds through an internal canal leading to the ear. This is a rough diagram of the ear of most fishes (a sketch): a b c, d, labyrinth; c, sac containing the ear-bone, which, set vibrating by the sonorous motions of any body producing the sensation of hearing, transmits the motion to the nervous fibers f f f, where it produces that sensation of hearing. The whole is in the back part of the skull.

"So much for the hearing of fishes. You may see the apparatus very readily, by cracking open the skull of any fish."

BREEDING QUAIL IN CONFINEMENT.

READINGTON, HUNTERDON COUNTY, N. J., Sept. 7th.
Editor Forest and Stream:—

I have been thoroughly interested in acquainting myself with the successful attempts of Mr. Benbrook, of Raritan, Somerset County, N. J., in raising quails in confinement. I have noticed in several papers, *FOREST AND STREAM* included, a brief notice of the fact; but I think the matter of sufficient interest to warrant more extended notice. I called yesterday to see Mr. Benbrook, and found him busy in constructing a house for their confinement and security. And just here I would like to offer a suggestion and also to state a fact. First, the fact. Mr. Benbrook labors against great odds in his attempt to prove the feasibility of rearing quails; for the following reasons: he is a person of very limited means and cannot at all afford such an expenditure as is required in order to secure the birds against accident. He has not lost a single bird from disease, but all he has lost has been from exposure to the numerous enemies with which they are surrounded, but which could be successfully overcome by proper protection; but this demands what Mr. B. cannot afford. If there was any profit in it, the matter would be very different; but it is all outlay and no income, and were it not for those most interested in and devoted to the accomplishment of his purpose, to think that birds can be (so to speak) artificially propagated and our country stocked with them, just as our streams are stocked by artificial means, he would no doubt have abandoned the attempt before this time, requiring, as it has, such unceasing care and constant watchfulness and no inconsiderable expense. And now let me offer a hint which my readers have already no doubt anticipated. There are, among the many wealthy sportsmen of our country, some one who, in the interests of the experiment, will come to the relief of Mr. B., and furnish him with such an outfit as is really necessary in order to complete success? I suggest this upon my own responsibility and without Mr. B.'s knowledge. If I had the means I would freely assist him, and give him a fair opportunity to prove the practicability of his scheme. I am heartily in sympathy with the efforts of late years especially, to improve the various strains of bird dogs, Dog shows, field trials, etc., are all in order; but if, with the increased excellence of dogs and the multiplication of sportsmen, the birds should become so scarce, as they have already, in a great many localities where they formerly abounded, of what practical utility is the keen-nosed pointer or setter. The value of the dog depends upon the abundance of the game.

But I have suggested for my purpose almost entirely, which was to state the present facts with reference to Mr. Benbrook's quail hatchery. He has learned from an experience of between two and three years how to care for the birds with reference to diet, mating, nesting, hatching, etc., and I venture to suggest that his experience is worth more than any one's else in our country, at least in these respects. Among other things perfect quiet on the part of strangers in the vicinity of the birds is a matter which he considers positively essential, and yet he will go among them himself without creating any alarm. It is really wonderful, knowing this natural shyness of the birds, to see him take them up in his hands when only a week or more old. From one pair he has now, after two summers' laying, twenty-eight birds and more eggs in process of incubation. There seems to be no difficulty in getting the hens to lay. I think he told me that they had laid this summer about 200 eggs, and they are laying very but do not seem inclined to set. So he has been compelled to provide an unnatural mother in the diminutive bantam. But here we have altogether too much weight upon the eggs, and after such of tender eggs as have survived this pressure have freed the chicks, the little fellows have to run the gauntlet of a fussy, noisy, scratching foster-mother, who flies at every living thing that comes near her almost, at the great danger of trampling and crushing the eggs. I am anxious to know the virtue of an incubator, but I have none and Mr. Benbrook has none. Who has? and who will provide one in the interest of the experiment?

But I must close. Will any one of the Westminster Kennel Club, or any other club, take the trouble to run up to Raritan, on the C.R.R. of N. J., and take a look and convince themselves?

If an incubator will hatch the eggs, I believe Mr. B. can with his present stock, next summer raise 1,000 full grown, acclimated birds, and then after that he can supply, in the following spring, all clubs desiring to stock such localities as they may prefer. Any one who will devote a few hours to a run up to Raritan, on the C. R. R. of N. J., can see for themselves, and I have no doubt will return with the conviction that our lively little game bird can be so successfully propagated as to revive the good old times when a covey could be flushed in any stubble.

P. R. V. S.

CLEVELAND, Ohio, Sept. 18th.

In July, 1879, I purchased a pair of common quails for the purpose of breeding, which was a failure, the birds not mating. During the winter and spring months they exhibited signs of mating. July the mating was complete, the female laying twenty-three eggs. After the seventh egg-laying, two eggs a day for four consecutive days. During twenty-seven days of incubation (six days overtime was due to dry floor, which might have been prevented by the sprinkling of warm water upon eggs and nest on the tenth, first or twenty-second day), seventeen chicks were hatched out. The chicks are now one week old, and are now doing finely. The quails are confined in an aviary, associated with other birds (song) in a room on third floor of building. The aviary is six feet square, thirteen inches high. Have placed four inches of fine sand upon floor for dusting purposes. Twice a week I renew coarse gravel for digestion. The gravel is kept wet by spattering of water from the other birds bathing. Quails will use dry gravel before, and during the laying periods, I fed the female houseflies, beetles, grasshoppers, mealworms and ants' eggs, the male reserving all to the female. Seeds I fed hemp, Canary, rape, millet, wheat and buckwheat. Lettuce, grated carrot, sweet apple, and cabbage chopped fine, for green food, which is an important item, preventing the female from becoming egg-bound, a fatal condition. Also plenty of fresh water. Quails are immense drinkers. Would suggest to those having failed in having their

eggs hatch out chicks, to separate males and females one month or more previous to breeding month—July—the male will then be more ardent. I may add, that the male assisted during the nest-making process, after which, taking very little interest, however. On the twenty-first day he commenced to take an active interest, visiting the nest often. On the twenty-seventh I noticed that he had entire charge of the hatching, the female taking charge of the drying of chicks as soon as hatched. During the progress of hatching, both male and female remained on nest and still continued to do the same. Our feeding young quail have boiled eggs chopped fine, mixed with rolled crackers, mealworms and houseflies. They also have access to prepared food for soft-billed birds.

B. R. L. S.

DUBUQUE, IOWA, Sept. 15th.
 Mr. S. Root, a photographer of this city and an ardent sportsman, purchased a pair of quail last winter that had been trapped, and this spring he made a wire screen and placed it against a stone wall at an angle of about forty-five degrees from the ground, so as to make a place of about fifteen feet long and three feet wide, and then put his quail inside. About three weeks ago the female made a rough nest and laid two eggs (one was unfortunately broken) and a few days later five young ones were hatched. Mr. Root informs me that after laying the hen deserted the nest, and the male took full charge and sat on the eggs and hatched them out, and even now takes all the care of them, and at the first note of alarm from him they all run under his wings and hide. Mr. Root also states that when he first commenced to set on the eggs he appeared frightened whenever any person came near, but after a few days he got very angry and rattle up his feathers, but would not get off as formerly. Mr. Root is very fond of his pets, and next year is going to have a larger place, and put in a number of pair in separate apartments, as his idea is that they will not breed if all put in together. I shall watch his experiment with a great deal of interest.

JULIEN.

Fish Culture.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISHWAYS, AND NEW YORK LAWS THEREON.

ROME, N. Y., Sept. 19th.

Editor Forest and Stream:—
 There is a story told of a man residing in Paris, during the past and frequent changes of administration of government in France, who made an agreement with his landlord, to pay a certain sum per week for lodging, and an extra sum to awaken him every morning and tell him what form of government he was under for that day. Any one who has been trying to keep track of the game laws and the amendments that have been going on for the last few years, will appreciate the need of just such a landlord. As all sportsmen are assured who are acquainted with the characteristics of trout, know that in a lake these trout in the fall of the year go up the inlet and down the outlets into the stream to spawn, and to return again to the lake in the spring. By building a dam on an outlet of a lake, the trout in the fall pass easily over the dam into the stream and spawn, but are unable in the spring to return up to the lake on account of the dam.

In a few years, a lake which before the erection of such a dam abounded in trout, would be almost entirely destitute of them. I have just such a lake in mind. The legislature tried to obviate this difficulty by enacting in 1871 (Laws 1871, chapter 731, p. 20): "Every person building or maintaining a dam upon any of the fluvial waters of this State, which dam is higher than two feet, shall likewise build and maintain during the months of March, April, May, September, October and November, for the purpose of the passage of fish, a sluiceway in said channel, at least one foot in depth, at the edge of the dam and of proper width, with four inch square cross pieces upon the bottom of the sluiceway three feet apart, which sluiceway shall be placed at an angle of not more than seven degrees, and extend entirely to the running water below the dam, and such sluiceway shall be protected on each side by a wall at least one foot in height, to confine the water therein," and making it a penalty of \$25 for each month's violations of the above.

Section 40, of the act of 1879, is deemed to have repealed laws of 1871, chapters 721 and 831, and the other laws following thereafter, which brings us down to game laws, of 1880, which say nothing regarding sluiceways in dams. Hence we are without a very valuable law, and I think too, one that the compilers of the game laws had no intention of removing. I had no doubt that the matter up, intending to have a certain owner of a dam comply with the statute, but I find that until the statute is again amended, he can erect a dam without a sluiceway, without fear or molestation of the law.

THE POUND-NET LAW.

At a meeting of the Board of Supervisors of Suffolk County, N. Y., on Sept. 20th, Mr. Halsey presented a numerously signed petition of inhabitants of Sag Harbor for the passage of a law forbidding the setting of pounds, fykes, nets, or traps for fish or eels in the Otter Pond and Cove, or within one mile of North Haven Bridge leading thereto. On invitation, Wm. White, of Sag Harbor, was heard in advocacy of the law asked for. On motion, petitions were referred to the Committee on Resolutions, and Mr. Reeves, from the committee, reported favorably the following resolution, stating that its passage was petitioned for by 169 citizens of Sag Harbor, that the committee had considered the subject and unanimously agreed to its passage. The resolution was read, put on its passage and adopted, all the members present voting in the affirmative:—

RESOLUTION NO. 24.

AN ACT to prevent the taking of fish and eels in the Otter Pond and Cove at Sag Harbor and the waters of the bay near the North Haven Bridge in the town of Southampton. Chapter 423 of the laws of 1875. It was passed Sept. 21st, 1880, by a vote of two-thirds of all the members elected thereto.

The Board of Supervisors of the County of Suffolk do enact as follows:—

SECTION 1. No person shall fish, or set or catch or take any fish or eels in any pond, lake or bay, nor set or draw any pound, fyke, or net in any of the waters of the Otter Pond or the Cove at Sag Harbor, in the town of Southampton, nor in the waters of Sag Harbor Bay within one mile of North Haven Bridge, except between the 1st of February and the 15th of April, in any year, and then only for the purpose of catching frost fish and alewives.

SEC. 2. Any person may in his own name before any justice of the peace of the town of Southampton prosecute for and recover the penalty specified in this act, and on recovery shall receive the penalty after deducting the expenses.

SEC. 4. This act shall take effect immediately.

T. H. CORWIS, Clerk. JOHN S. HAVENS, Chairman.

Mr. Reeves, from the same committee, reported adversely upon the petition of residents of North Sea and vicinity for a law to forbid the setting of seines, fykes, or set nets in North Sea Harbor and the channel thereto, during March, April and May. The report was adopted and the committee discharged from further consideration of the subject.

DR. GABLE'S BOOK.—We learn that while the book, which we noticed in our issue of 16th inst., was in the hands of the printer, some one stole out all the portion relating to the famous Hachman controversy, and the letters of Prof. Baird on this subject, and the author being an invalid did not discover it until the whole edition was bound and he had received a copy, which necessitated his re-writing it, and having the entire edition rebound in order to get it in its place.

Comment upon such an act is unnecessary, and we think the man who did it, capable of stealing acorns from a blind sow. The Doctor merely wished this to appear as an act of justice, and to show that there was no longer any misunderstanding between persons who in the search for truth had taken other paths. A slip of the pen in the notice made us say, "The angling portion of the book gives no notice of the black bass, white bass," etc., when we meant to say that it did give some account of them.

HOW THE FIRST SHAD WERE HATCHED.—"Aquadale Pond," Wenonah, N. J., Sept. 17th.—I noticed in your issue of the 16th inst., the communication of Mr. Sedgwick, referring to an "Shad hatching ground at Shad Lays," and expressing a desire to be informed of the name and address of the "old fisherman" who first hatched the shad at South Hadley Falls. For the information of Mr. Green and others interested, I will make the following statement. During the latter part of last May I visited South Hadley Falls to make an examination of the fishway attached to the Holyoke dam, and to obtain such general information as would be of use in regard to matters at that point and vicinity. While making some investigations in the city of Holyoke, I referred to what I supposed was the fact, that Mr. Green hatched the first shad at that point. I was surprised upon being informed that an old shad fisherman at the Falls was the man who first succeeded in the attempt. I asked his name, and was informed that it was "Smith." (I presume Mr. Green may have heard of that name before.) There appeared to be two or three gentlemen in the group, conversing with the facts, but I knew none of them. I had in my pocket, however, a letter from E. A. Bracket, Esq., one of the Massachusetts Fish Commission, which contains the following paragraph: "C. C. Smith of South Hadley Falls, is as well informed in regard to fish in the river as any one I am acquainted with." Having learned from others that the shad fishing at the Falls was in the hands of Capt. Smith, I concluded he was the man referred to by the different parties, and having occasion to call upon him the same day, I referred casually to Mr. Green's success in hatching shad there. He at once replied that Mr. Green's attempt was a failure, and then repeated what I had already heard at Holyoke, and substantially what I said in your issue of Aug. 26th, the father of Capt. Smith being the old fisherman referred to. I believe he has been dead some years.

As a former claim in my former article, viz: "I believe Mr. Green received the credit," should have been further qualified, and Mr. Smith with the idea of the proper location. Mr. Green claims that the hatching was done in the river, but either himself or Capt. Smith and the others there have forgotten the location, and possibly other facts.

MILTON P. FINE.

THE FIRST DECADE OF THE UNITED STATES FISH COMMISSION.—In our report of the paper read by Prof. C. Brown Goode before the American Association for the Advancement of Science, Boston, Aug. 28th, in our issue of Sept. 2d, there occurred an error which we now take pleasure in correcting. What Prof. Goode said was as follows: "I am indebted to Prof. Verrell for the following estimate of the number of species added within the past ten years to the fauna of New England, mainly by the agency of the Commission:—

Formerly Known. Additions. Now Known.

Crustacea	165	193	258
Pneogonidia	5	10	15
Annelida	228	228	456
Vermetes	39	100	139
Mollusca	317	100	417
Gastropoda	41	41	82
Anthozoa or Polyps	20	35	55
Hydrozoa or Acleophora	102	78	180
Polychaeta	10	10	20
Polychaeta	56	91	147
Brachyopoda	5	10	15
Sponges	10	80	90
Total	800	1,000	1,800

MACKEREL FAR SOUTH.—The Charleston, S. C., News says: "On Saturday last, while the crew of the fishing smack Fish, Thompson were fishing on Black Fish Banks, off the bar, they struck a school of genuine down East mackerel, and succeeded in taking one of them. None of them have ever been seen south of Cape Lookout. It is possible that the confusion, which seems to agitate the State of Maine, may have driven these fish to seek the seclusive and quiet waters of the South Atlantic Banks, off the bar, they struck a school of genuine down East mackerel, and succeeded in taking one of them. The specimen taken is a perfect beauty, about 13 inches in length. The same fishermen also caught an unusually large sea-robin or flying fish."

Sea and River Fishing.

TIE ALEWIFE IN FRESH WATER.

ROCHESTER N.Y., Sept., 16th.

Editor Forest and Stream:—

During recent visits to several of our inland lakes, I have made discoveries which may be of interest as well as beneficial. I have discovered that the alewife, commonly called "saw-bellies," breed in our inland lakes. I made this discovery while drawing a small minnow net for bait, and drew in the young fry of this and last spring's hatch. This discovery I consider very valuable, as there is no better food for all kinds of fish, and especially the salmon trout. I would advise all parties interested in any inland lake to procure them and stock their waters. They are a more valuable food fish than the fresh water herring or young whitefish, because they are a spring spawning fish, and breed much faster. Their spawn is not more than three or four days in hatching, whereas the fresh water herring and whitefish are fast spawning fish, and their spawn is all winter in hatching, and the fact of their being so much longer exposed makes the percentage which hatch very small. As all kinds of fish feed on them, and unless they happen to be cast in a spot where they will receive the proper circulation and keep free from sediments, they will not hatch. The alewife hatches at least one thousand young for every one of the fresh water herring or whitefish, and their value as a food fish is inestimable. In Lake Kenka the "saw-bellies" were put in eight years ago and there is an abundance of them, and has been for the past few years.

To show that all kinds of fish feed on them, I have caught, with them for bait, salmon trout, black bass, rock bass, perch, pickerel and bullheads.

I have also learned in what depth of water salmon trout are found at the different seasons of the year, and also the time of day they feed. During the months of April, May and June they are found out in deep water, at depths; in April and May mostly at the top; through July and August, and first of September they are hardly ever caught, except within a few feet of the bottom, and when the atmosphere and water begin to cool off in the latter part of September they commence to rise to the surface again, and in October and November are on the shoals and reefs, casting their spawn. During the spring they come to the surface at sunrise to sunset; during June from sunrise until about noon, and during July, August, and 1st of September, from sunrise until about 10 o'clock, and one hour before sunset. On a recent trip to one of our inland lakes, "saw-bellies" being very hard to procure, I was obliged to open every trout caught in order to obtain bait. The trout—as, in fact, do most all fish—swallow their food whole, and the "saw-bellies" were not so badly mangled but what I could put them on my hooks. It is through this means that I learned when the trout feed during July, August, and 1st of September. In their stomach was found the food which had been taken for three days, in three different stages of decomposition. The trout which were caught from daylight until 7 o'clock had no fresh food in them, while those caught after that time and until they stopped biting at about 10 o'clock contained from one to four fresh "saw-bellies." I found in but few, food which had been taken before sunset the evening previous, which shows they do most all of their feeding in the morning, and do not feed at night.

I found no young trout in any of them, which shows that they do not feed on the young of their own kind.

SETH GREEN.

BLACK BASS IN FLORIDA.—Rivford, Fla., Aug. 11th.—Tell St. Clair if he will visit me I will allow him to take bass from ponds that I have stocked, that I do not think he will call anything else by the name of black bass, and if not satisfied with that, he can capture them in the Old Suwanee River, the small mouth species. Now that the river does not empty into the Atlantic, but the St. Mary's does and there he can capture as fine ones as were ever hooked. If still he doubts he can go to Lake Santa Fe and take them there till he is tired of the sport. In the Neuse river, North Carolina, they are plenty, and the fishermen call them Weishmen. In every other place South where they are taken, they are called "trout," and they bear to a casual observer in their general resemblance to the speckled beauties in our Northern streams, as they lie motionless in the water. Of course the illusion is at once dispelled when they are landed.

GEO. C. RIXFORD.

DON'T CARE MUCH ABOUT FISHING.—Last Sunday one of our Sunday school superintendent, on his way to church met, a boy with a fishing-pole. "Where are you going with that pole?" asked the superintendent. He had just seen the boy since the last time he filled up at a Sunday school picnic. "Please sir, I've got a wicked father, who sends me out to fish every Sunday morning; but as soon as I get out of sight of the house I am going to play hockey, and come to Sunday school."

VERMONT FISHING.—Poultney, Vt., Sept. 15th.—I promised to write when I left Uster and Delaware counties last May. I started in fishing at this place for trout, and found them small and hard to get, not catching more than 100 in five different times I went fishing. After doing so well in New York State, I concluded that this kind of fishing would not suit me, so I gave it up in disgust.

Bass and pickerel fishing is good, and has been all summer. Herein can be caught from sunrise to sunset. I have caught 200 in five hours fishing; others have done a great deal better. This is a very pretty lake, and is fed altogether with springs, and a desirable place for a trout. This could be made one of the finest fishing lakes in the United States. All that is necessary is to stock it, and make a heavier penalty than there is for netting or spearing them, which I have no doubt is carried on extensively at certain times. Mr. B., of Philadelphia, caught a 5-pound pickerel that had the marks of where he had been speared. Let the authorities look into this matter, and stop it before it is too late. I hope also to see the Fish Commissioners of Vermont take an interest in stocking this beautiful lake, and making it second to none in the northern county. Squirrel shooting is excellent, partridges and woodcock quite plenty, and we are having plenty of sport. Any one desirous of coming here

can leave Grand Central Depot at 11 A.M., ticket to Poultney, drive three miles to lake, and stop at Lake View House, Mr. P. J. Griffith proprietor, and I will guarantee a cheap trip, good time and plenty of sport.

H. C. WEST.

MAINE NOTES.—Eustis, Maine, Sept. 20th.—Here I am again at mine host Hutchins', where I can enjoy myself much and at expense than at any place in Maine I have ever visited. Have returned to-day from a two weeks' sojourn at Alder Stream Pond, and such nice, deep-red fleshed trout, and in such abundance, I never before saw. A good, nice camp and boats, a beautiful lake set in the valley of the "Five Round Mountains," like a "jewel set in the bosom of Hebe."

Myne host Hutchins has just completed a road from his place to the famous Spencer Lake, a region entirely new to sportsmen, and the route embraces twelve lakes and ponds, all full of the nicest salmon trout, while moose, caribou, ducks, deer and partridge abound all along the route. Should any of your patrons wish for more sport, a letter of inquiry to friend Hutchins will tell them all the particulars and just as they will find them. Address O. A. Hutchins, Eustis, Franklin County, Maine. More when I arrive at Boston. J. M. FITCH.

BUCKTAILING FOR BLACK BASS.—Warsaw, Ind., Sept. 20th.—In reply to "G. F. W." in FOREST AND STREAM of Sept. 16th, I would suggest "bucktailing" for the larger species of black bass in Webster Pond. I have found this allure effective when all else has failed, at the same time offering the most pleasurable and scientific mode of modern angling. The construction of the bucktail or buckly is as follows: Tie three bass hooks at right angles from another. Tie the hair of a deer tail around and completely covering the hooks, allowing the hair to extend an inch below the hooks. Use by casting same as with any other bass fly. This in the hands of an experienced and persevering follower of "Old Ike," success is certain. H. A. Z.

Bass fishing at the St. Clair Flats has been uncommonly fruitful this season, and from this time until the middle of October the punter natives of the region will be in high feather. The bass are extra large, many that I have seen scoring from four to six pounds. Two that were shown me to-day weighed each six and a half pounds. They were caught by J. V. D. Eldridge, of this city, whose achievements with both rod and gun in former years are matters with which many of your readers are well acquainted. All fishermen here who have observed the Flats yield say that no such season as this has been known since 1870. Parties from Louisville, Cincinnati, Atlanta, Cleveland and elsewhere have been enjoying the glorious sport for a week past, and Detroit has turned out every fisherman who could spare a day or two, bent on the same fascinating sport. Col. Valentine C. Hanna returned yesterday from a three days' excursion to the Flats, during which time he caught over two hundred pounds of the finest bass seen in one jump in a generation. Seventy-five to one hundred pounds a day is not an unusual catch for industrious workers. A. C. McGraw, a well known Detroit, who carries his seventy-six years as lightly as a boy, went up for a half holiday on Thursday last, and caught twenty large bass, every one of which was a legitimate capture. We hope to see an invasion by New Yorkers before the middle of October.

A BIG BASS FOR A SNAKE TO EAT.—A correspondent writing from South Vernon, Ind., tells us that while fishing he killed a large water moccasin which had a suspiciously large bunch inside it, which on opening proved to be caused by a bass of fully half a pound in weight, certainly a large fish to swallow, and a prickly one, too, which ought to cause a fit of indigestion, but it is more than doubtful if it did.

WEAKFISHING ON THE COAST OF NEW JERSEY.—Riverside House, Forked River, Sept. 24th.—Weakfishing still continues good, a daily catch of fifty per boat for the past week. A party from the lighthouse caught yesterday, fishing outside, 262 weakfish, some of which would weigh nearly 4 lbs. Several gentlemen still linger here enjoying the sport, among whom are Wm. H. Hewitt, Wm. Henry Brown and Jas. K. Townsend, of New York. No bluefish yet.

AN EIGHT AND A QUARTER POUND TROUT.—The following letter from Messrs. A. B. Shipley & Son, fishing-tackle dealers, Philadelphia, explains itself. The fish is to be mounted by a taxidermist, but would be so much better preserved by the Wickersheimer process that we always regret to hear of a fine fish being stuffed:—

SOLE'S CAMP, Maine, Sept. 20th.

Messrs. A. B. Shipley & Son:—

I suppose by this time you think I have forgotten you, but to-day I have the pleasure of sending you a trout (*Salmo fontinalis*) that weighed eight and a quarter pounds when caught. I took him on a fly-rod and played him an hour and a quarter. As you wanted a good sized one for mounting I send the fish to you.

JOHN A. SCHULZE, Bangley, Maine.

THE "REDDING" TROUT FLY.—A new species of fly has been found to inhabit the fly books of anglers in California and is occasionally found sporting itself at or near the ends of their lines. Of this new fly the *Olympian* says: "This fly has been made by a fishing tackle dealer in this city, and named by him after B. B. Redding, one of our State Fish Commissioners. The Redding deer fly has the hair of the deer wart reversed on the upper part of the hook so as to open when drawn through the water. The lower part, or body, is made of green peacock hair."

FIVE MILLION FISH HOOKS.—The Germantown Telegraph says: "The only firm in the world that is said to make fish-hooks by machinery is located at New Haven, Conn. They received an order the other day for five million hooks from New York. The order is reported to have been sent by the editor of FOREST AND STREAM, who is anxious to take a tilt at the St. Lawrence bass!"

All right, neighbor; when they come we'll ask you to go along, if you'll dig the worms.

Game Bag and Gun.

GAME IN SEPTEMBER.

Moose, *Alce americana*.
Caribou, *Rangifer caribou*.
Elk or wapiti, *Cervus canadensis*.
Buck or Virginia deer, *C. virginicus*.
Squirrels—red, black and gray.
Hares—brown and gray.
Hood or rice bird, *Dolichopus*.
Sparrows.
Wild turkey, *Meleagris gallopavo*.
Pinnated grouse or prairie chickens, *Caprimulgus*.
Ruffed grouse or pheasant, *Bonasa umbellus*.
Quail or partridge, *Oryzopsis virginiana*.
Sora, rail, *Porzana carolinensis*.

Woodcock, *Philohela minor*.
Black-bellied plover, or eye, *Squatarola ledicola*.
Long-billed curlew, *Numenius longirostris*.
Turnstone, or calico back, *Streptopelia interpres*.
Red-breasted snipe, dowitcher, *Macrophthalmus griseus*.
Red-backed snipe, or ox-bird, *Tringa americana*.
Great marshed godwit, or marsh, *Limosa falcata*.
Willet, *Colaptes auratus*.
Tattler, *Totanus melanoleucus*.
Yellow-shanks, *Totanus flavipes*.

This enumeration is general, and is in conflict with many of the State laws.
"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, surf bird, phalaropes, avocets, etc., coming under the group *Limicola*, or shore birds. Many States permit prairie tow (pinnated grouse) shooting after Aug. 15th.

A CONTRAST.

CARL DITTMAR SAYS.

Writing to Sportsmen.

"I pledge my word of honor that I have never sent, and never will send, powder for sporting purposes which should have the slightest trace of nitro-glycerine in its composition."

Letter in ROD AND GUN, Aug. 14th, 1875, Vol. VI., page 385.
"If some gentlemen have damaged their guns it would only be by negligence, and by not following my directions. It is absolutely impossible to damage a gun, weak or strong, except by careless loading. If my powder is used according to my instructions," Letter in ROD AND GUN, Aug. 14th, 1875, Vol. VI., page 385.

"When I first commenced making this new powder I had no more experience than your correspondent, but I have not had a single accident, although I have fired more than two thousand times in a variety of guns."

Letter same as above.
"In conclusion I would say that sportsmen and riflemen are and have been experimenting with my new powder all over the country, and the testimonials thus far received are in the highest degree satisfactory." Letter in ROD AND GUN, June 22nd, 1875, Vol. IV., page 315.

We add, for comparison with the sworn statement quoted above, only one quotation. It is from a letter of Carl Dittmar, in the FOREST AND STREAM, March 16th, 1875, the italics our own:—
"Since 1st of September, last year, I make an entirely different powder, much harder grain, not so compressible as the first. But even with the softest kind I made in the first time I have not been able to injure my guns."

ECHOES OF THE "DITTMAR SPORTING POWDER."

ELMIRA, N. Y., Sept. 26th.

Editor Forest and Stream:—

I have just finished reading your exhaustive article on the "Dittmar Powder," for which many thanks. I was indebted to your subscriber and correspondent, Dr. T. S. Up de Graff ("Bodines") for the privilege. J. B. C.

Editor Forest and Stream:—

I have read your "Dittmar Sporting Powder" article, and take pleasure in saying that I like it very much. The general plan you have adopted, viz., to begin at the bottom and build up in a solid and gradual manner, so as to make your readers see clearly the reason why Dittmar powder must be dangerous, is just the way and the only way. You have done nobly. I look with much interest for the balance of your article. X.

NEW YORK, Sept. 25th.

Editor Forest and Stream:—

I must thank you very heartily for your excellent article published in this week's FOREST AND STREAM on the "Dittmar Sporting Powder." If every lover of the gun would consider what he is using and the danger he is placing himself in by using this explosive, there would be fewer shattered guns, hands and heads. Fact is fact: truth is truth, every time. Warn the sportsmen and you are doing your duty. Yours truly, E. H. R.

NEW YORK, Sept. 25th.

Editor Forest and Stream:—

I have read the article on "Dittmar Sporting Powder," in your issue of the 23rd inst., and take great pleasure in thanking you for exposing the qualities of said powder. I have used the powder to some extent, fortunately without accident; but it is needless to say that I shall never dare to use it again. I believe that I never saw any account of the explosion that occurred at the office of the "Dittmar Powder Manufacturing Company" (No. 2, Ann 1 right), some time since, in your paper. Would it not be well to refer to same in your future article on the powder? Again congratulating you upon exposing the dangerous compound to the public, and especially to the sporting fraternity, I remain, yours very truly, S. A.

[Extracts from a letter dated Sept. 13th.]

Mr. Nash gave us very little information about the loading of the exploded shell, beyond the charge, and on the other hand the Dittmar Company gave us about as little about the powder in the case; for it is impossible not to agree with you, Mr. Editor, that their experience proved nothing. The danger of powder depends mostly, perhaps entirely, upon the speed with which the pressure

is developed, instead of the actual pressure itself. And I don't believe it possible to construct anything in the shape of a gauge that can properly test the strain on barrels caused by too sudden evolution of gas. It is a great pity that the company could not have experimented on some strong musket barrels, or something of the sort.

Mr. Dittmar should have no hard feelings against Mr. Nash, or any one else. The question is too important to allow business interests to have a feather's weight of influence. He should be thankful for criticism, and do his best to remedy defects. It is the duty of any sportsman knowing defects to point them out, and the duty of sporting papers to publish them. At this age of the world the presumption is generally in favor of anything new, but with a thing so important in its effects as powder, the presumption is and should be against anything new. Every such thing must expect to fight its way into favor, and its owners should respect that conservatism which demands positive conviction before yielding.

T. S. VAN DYKE.

DOG POISONING IN MINNESOTA.

WINDOM, Minn., Sept 20th, 1880.

Editor Forest and Stream.—From Fairmont, this State, dated on the 1st inst., and recently published in the FOREST AND STREAM, escaped my notice until to-day, and that you will allow one of the "pot-hunters of Windom" space for reply I assume, and in doing so I find it necessary to ask you to reprint the following portion of "Wausee's" letter:—

"The recent wholesale poisoning of bird dogs in Cottonwood County, and the equivalent poisoning of the local dogs in Windom reported in regard thereto, are still topics of peculiar interest to non-resident sportsmen in Minnesota. True, the people of Windom, many of whom, charged over the desecration of "them dandy sportsmen," are now charging their to and explaining things away, as they begin to perceive that the damage done is not so slight as they at first supposed. The dog bite dogs have not been slow to shake the mud of Windom from their boots and seek their sport in less perilous regions. In future the pot-hunters of Windom will have to do for themselves, as well as the hotels and business houses of the village, as well as the neighboring farmers, will probably miss the ready cash which the average visiting sportsman lavishes so profusely during the hunting season.

In this State the chicken season begins Aug. 15th. On the 10th of that month some seven or eight dogs belonging to citizens of Windom were poisoned—by whom, or through what motive, remains yet a mystery. About the same time dogs in a neighboring village met a similar fate. I am credibly told. A day or two before the 10th the "non-resident" sportsmen came. On the following Wednesday a dog from Memphis died about two miles in the country, and a day or two later a St. Louis dog was poisoned in the Clark House barn. Hence it will be seen that the Windom sportsmen are the principal losers of dogs, poisoned, as many firmly believe, in the interest of a "non-resident," but for various reasons I will not assert that the theory is correct. But it will be seen that war was begun here in a "wholesale" way, upon our own bird dogs, while "Wausee" attempts to show that the "wholesale" poisoning was directed toward the dogs of the visiting sportsman, who only lost two; and I have no doubt the Memphis dog ate the poison that was laid for the Windom dogs. Poisoned meat was found in the yards of several residents, as well as near the dead St. Louis dog, and one dog died in the very door of its owner.

The effort of "Wausee" to cause it to appear that this unfortunate and disreputable business was indorsed and condoned by the people of this community, or the news paper in question, is as "dastardly" as the poisoning itself, but "Wausee" is aware that his party was not warmly welcomed, and evidently is trying to "get even" with us by false representations.

"The business men," they will "miss the ready cash," will they? How ridiculous! True, they patronized one hotel and two lively stables. No one else, however, "lavish" their "ready cash" and one noticeable feature with those "visiting" sportsmen is that they bring their ammunition with them, and even try to pay their hotel bills with birds shot with ammunition bought elsewhere. So much for the "ready cash" they "lavished" in Windom. This is the extent of the business they gave the town, and had it been practicable "Wausee" and his friends would have brought with them their hotels and liveries also.

Any of the "non-resident" sportsmen are in ill odor for the hogish manner displayed in their hunting birds for market, thus making the country over which they hunt help bear their expenses while here, and sending the money out of town for the very material with which the birds are shot.

The money the farmers receive from such men as "Wausee" will create no desire to see them return. Farmers complain seriously at the ruthless manner in which these "non-resident" sportsmen trespass upon their growing crops, which this year have proven slight barriers to their frequently driving through fields of flax and "letting lose the dogs" of sport, and when renouncing against it the farmer is repulsed with profanity. These are by no means isolated cases. In another instance, a farmer by the name of Pickel, was sent in his own field by one of these "non-resident" money dispensing gentlemen, who coolly drove off without apologizing, not however, without begging the farmer not to return the compliment with a rifle he had in his hand at the time.

If "non-resident" sportsmen are not cordially received in Windom it is for faults of their own, of the character indicated, but the least intimation that their dogs were poisoned on account of any one of them, is not only regretful and criminally false. The local sportsmen regret the poisoning, and deprecate it as much as "Wausee," and none more than the writer, and we hope your correspondent will yet learn that the people of Windom are too brave to wreak their dislike upon men by such merciless attacks upon innocent and defenseless dogs.

Sportsmen have come and gone, and will return again next year, while others have gone, we hope, not to return until they learn to treat the country with ordinary respect. Every sportsman who comes with anything in his breast like "doing unto others," etc., will be cordially welcomed, as dozens who have been here this year will attest, and these are they who "lavish" their "ready cash" among the "business men" in the sense "Wausee" implies.

"WINDOM POT-HUNTER."

MINNESOTA FIELD SPORTS.

Editor Forest and Stream.—

My brief article in your issue of Aug. 19th has brought me several letters from widely separate points, asking for information relative to the country. As I have no axe to grind, and as all the letter writers claim to be sportsmen good and true, and vital subscribers (as they should be) to the FOREST AND STREAM, I ask space in your columns for a few particulars.

This town, Burnsville, is the eastern town of Todd County, Minn.; Todd County, being wholly on the western side of the Mississippi River, and about one hundred and forty miles from St. Paul. No railroad enters the county, Little Falls and Sauk Centre being the nearest railroad points, Little Falls being twenty miles from this town and Sauk Centre thirty. The eastern part of the county is principally timber, but with fine stretches of prairie and many fine meadows. The soil is excellent. The country, especially the eastern half, fairly blossoms with lakes, some with high bold shores, others with marshy borders. I am living at the outlet of Little Swan Lake, a beautiful sheet of water about one and three-quarter miles long by one-half mile wide. Three miles above is Big Swan Lake, nearly three times as large; the two are connected by Swan River. Three miles southwest are Bass and Long Lakes, about the size of the former, and three miles south are the two smaller lakes, a trifle smaller. The southern limit is Rice Lake, which is merely a large marsh, its surface nearly covered with wild rice. Big Swan has also large rice beds.

There are also many pond-holes and marshes. All of the lakes abound with fish, every variety almost being found save trout. Spring and fall the duck shooting is grand; but few geese comparatively are found hereabouts. I presume, in fact I know, that tons of venison was killed here last hunting season. Bears and wolves are not "thick," but more or less are killed every year. As for rabbits, fifty a day, in the winter, would not be a large bag. Being off the railroad, sportsmen never find their way here. In the two years I have been in the county, I have never seen but one sporting party, and mine is the only breech-loading shot gun in town.

Now a word personal, as it is asked for: I am a Massachusetts clergyman, but for my hobby; I am a sportsman in the true sense of the term, and shall return East this winter, I think. I have never had and am having magnificent sport. If any true sportsman, who neither swears or gets drunk, wishes to enjoy himself, this is the place where he can have the utmost pleasure.

Hon. Leon Loude, of Little Falls, and Hon. C. M. Loring, of Minneapolis, have been in camp for two days at Long Lake, two miles from here. They report the finest bass, pickerel and pike, and a few of them ever experienced. Mr. Loring caught fifteen fish, one of them a pickerel weighing fifteen pounds, in one morning before breakfast.

Ducks are flocking in abundance: Rice Lake is reported full of them. J. F. LOCKE.

ALL ABOUT WILD RICE.

RICE LAKE, Sept. 23d.

Editor Forest and Stream.—

As the subject of wild rice is receiving a great amount of attention from a number of your readers, perhaps the following will be of some benefit to a few of them.

When wild rice becomes ripe in the fall, the seed drops from the stalk into the water, and immediately sinks to the bottom. Here it lies all winter, perfectly dormant, until the following spring, when it begins to sprout about the 1st of May, and reaches the surface about the middle of June, according to the depth and temperature of the water. For a month it seems to grow very slowly, but, after that, its growth is wonderful. By about the 1st of September it stands two to five inches above the surface, and the seed, getting ripe, commences to fall into the water, and continues doing so as long as there is any grain left upon the stalk. The old straw is torn up by the wind, and floats away or sinks to the bottom.

In Rice Lake the Chippewa Indians have the exclusive privilege of gathering the wild rice—the *nodus operanti* is as follows: An Indian kneels in the bow of his canoe, generally a dug-out, and draws it through the rice with his paddle; a saw, seated at the stern with a small light cedar stick, the shape of a martine-spike, about three feet long, in each hand, draws the rice toward them with the stick in one hand until the heads are over the canoe, when she strikes them a couple of quick light strokes with the other stick, knocking the seed into the boat. Upon doing this she lets go the rice, and repeats the operation upon the other side, the canoe going all the time. In this manner they will gather two to five bushels per day, according to the crops.

That wild rice is the favorite food of ducks I am quite certain; and, were I possessed of a pond or lake, to which I desired to attract them, I would plant it in preference to anything else. It is quite hardy, and, with a little care at first, will grow almost anywhere. It has been grown successfully in the Ottawa River, and Dr. Everhart, President of the Leckavanna Game Protective Association, I believe, whom I met here last fall trying his hand at the ducks, secured a barrel from C. Gilchrist, Inspector of Fisheries for Rice Lake. He planted it in some of the streams in Pennsylvania and it grew well. Mr. Gilchrist also sent a barrel to Stockton, Cal., last winter, where it was planted and this spring sprouted, but was drowned out by the breaking away of the levee during highwater, covering it with ten or twelve feet of water.

HOW TO SOW THE RICE.

The proper conditions for the successful growth of wild rice areas follows: Two to four feet of water, if soft, warm and free from minerals all the better, soft muddy bottom; it will grow on sand and gravel, though it will be thin and stunted for a couple of years, but at the end of that time, if undisturbed by wind or current, the accumulation of old straw at the bottom will form a mud bed and a good crop of rice will be the consequence. Two years ago, when I was in the camp at Rice Lake, I put up tent on Spooke Island; all around it there was a hard, sandy bottom, and about thirty feet from shore there was a thin line of rice, about twenty feet wide, through which I used to swim to get to the clear water beyond when bathing. This year the rice was so thick and heavy the Indians were gathering there.

Weeds and moss will retard its growth somewhat, but it generally crowds out other water plants. When once started it is impossible to eradicate it, except by pulling it up when young or drowning it out with ten or twelve feet of water; also, it will spread in every direction and will get so thick that a person can hardly paddle a canoe through it.

After being thoroughly soaked in plenty of soft water it is planted as follows: Two men go in a boat, one paddling the other sowing in the old old-fashioned manner of sowing grain by hand. If the pond is exposed to heavy winds or strong currents sow thickly; if sheltered and free from current sow thinly, as it will spread more quickly by doing so.

Blackbirds are passionately fond of it in the milk state, and tame geese are simply "terrors," sometimes cleaning out a whole bed. Keep them out at all times.

F. C. G.

WILD RICE FROM RICE LAKE, ONTARIO.—Many inquiries reach me about procuring and growing wild rice. Through your columns I state a few facts which may serve as a general answer to correspondents. In 1876 I bought from Charles Gilchrist, Esq., of Harwood, several bushels as an experiment, and sowed the same in a bay of the Ottawa River. The following autumn it grew to a height of from six to eight feet, and was full of grain, which enabled me to gather about twelve bushels for food elsewhere. Since then I have renewed the sowing occasionally and kept up the growth. This fall I intend sowing some twenty or thirty bushels more. In addition to its utility as food in the shape of rice bread or cakes and pudding, this plant has wonderful powers of cleaning and cooling the temperature of water and muddy bays. It is such a strong feeder that it absorbs the principal part of the nutriment on which plankton subsist, and which in solution accumulates to form a caky coating of mud in marshy bays. It also grows so high and thick as to shelter the water and keep it cool. I consider it one of the most valuable aids in fish ponds for the above reasons, as well as because it breeds and furnishes great quantities of insect food for young fish. Of course it is an attraction for ducks is well known. The stock gathered at Rice Lake is of the finest kind, and being attended to by an active and intelligent man like Mr. Gilchrist, it is well prepared for shipment.

W. F. WHITCHER.

Rideau Bank, Ottawa, Sept. 16th.

A COMPANION OF FORESTER.—New York, Sept. 23d.—*Editor Forest and Stream.*—Will you allow me to call your attention to the death of Mr. A. L. Williams, of Candandaigua, which took place a few days ago. Mr. Williams formerly lived in Newark, and after that, in company with "Frank Forester," William S. Porter and other famous old sportsmen. He was a model sportsman in every respect, a thorough good shot and fly fisherman, always scorning anything approaching pot hunting or poaching, and ever ready to give the best place, either to a fellow sportsman or to the river, to a friend. Mr. Williams was a naturalist of no mean order, perfectly competent to set up a rare bird or preserve a fine specimen of a wild flower. Of late years Ralston, Pa., was one of his favorite haunts, and many happy days I have spent with him on the beautiful Lycoming. He taught me all I know in the way of casting a fly for bass and trout, and also wing shooting, and for twenty years we have shot and fished together. As I said before, a truer sportsman or better friend I never knew.

W. HOLBERTON.

NEW YORK—WINDSOR FARM, BROOKING COUNTY, SEPT. 11th.—The shooting season has opened with good prospects. Have been out three days since Sept. 1st for grouse. Bagged in all twenty-two grouse, and squirrels are more abundant than they have been for several years. This morning I killed six woodcock. They are through moulting, and have settled down upon their old grounds. A few ducks have passed in their flight. Yesterday I bagged two black ducks and four teal on the Susquehanna River. Fishing is also good. Perch and bass readily take live bait or strike for the spoon hook, and bass are as hungry as ever. The lakes and ponds about here are in good condition, and sportsmen are having average luck in these waters. With a friend I fished an hour and a half in the Susquehanna, one day last week. The catch was eleven black bass, weighing fourteen pounds and a half. I have captured a number of walleye, and recently a few muskies, near Appleton. These fish, once common, though for several years but few have been taken, are returning to our waters.

CLIFTON.

POUNDER MEASURE.—*Editor Forest and Stream.*—I enclose on page 11, Vol. 15, a "Member Montgomery Shooting Club," in attempting to correct a "Moulting Manchester Shooting Club" is nearly as wide of the mark as the gentleman he attempts to "coach." The pound Troy is divided into ounces, pennyweights and grains. There are no drachms in Troy weight. The pound apothecary, which is the same as the pound Troy, is differently divided into ounces, drachms, scruples and grains. The pound avoirdupois, which is different from either of the recently mentioned, is divided into ounces and shot are always weighed, is divided into ounces, drachms and grains, viz., twenty-seven and one-third grains make one drachm; sixteen drachms one ounce; sixteen ounces one pound. If your correspondents will weigh their charges by this table they will correspond with the standard measures. The grains are same in all weights.

OKOIT.

OUR DEWIGHT LETTER.—The season is fairly upon us, but the lingering heat of summer which makes memorable these fervent September days is a handicap for the devotees of the gun. Nevertheless, many mighty hunters are seen in the gathering places of the tribe hereabout, as they flit into town on their way to the north woods of Michigan, where "the red deer and roebuck abound." I have of late noticed on the streets many well accounted and energetic sportsmen thus bound. Neither heat nor tales of ill fortune deter them, and you may expect with the first grateful change to hear entertaining tales of their achievements. New York City and State are well represented in this influx of woodmen.

Of purely local matters I may mention the fact that that prince of sportsmen, Ed. Gillman, accompanied by Dr. Fred Anderson, formerly a well known Cincinnati

Norman.....	21 yards.....	1 0 1 1 1 1 1 1 1 0-5
Agia.....	23 yards.....	0 0 0 1 1 1 1 1 0 0-5
Sizer.....	21 yards.....	1 1 1 1 1 1 1 1 1 0-9
Miller.....	21 yards.....	1 1 1 1 1 1 1 1 0 1-9
Nicholas.....	23 yards.....	0 1 1 1 1 1 1 1 1 1-9
Kelly.....	21 yards.....	0 1 1 0 1 1 1 1 1 1-3
Boscher.....	21 yards.....	1 1 1 1 1 1 1 1 0 1-8
Wagon.....	22 yards.....	1 1 1 1 1 1 1 1 1 1-8
Fejer.....	21 yards.....	1 1 0 0 1 1 1 1 1 1-9

Lager and Miller tie, 9 each, which resulted as follows: Three birds each: Lager 3, Miller 3; second tie: Lager 2, Miller 3. Club sidge and gun won by Miller.

time that his fondness for hunting has given you a little trouble at home before now. Let him have a good thing left for himself, and let the stream before he settles down to your signals by hand, which must be given as possible, which you will soon see he will look for. Therefore, let no one be with you to take up his or your attention at any time: rather stop your work for the day. Presuming by this time he is off to the right, be in no hurry to blow your whistle, as very likely he would not mind if he is so full of work. Let him turn of himself, and when he does turn try to get him to cross you to the left. But very likely he will pay little attention until he has been down for a time: he will likely remember to be looking for the first few days until he knows what is intended to be done, when he will settle down steadily to you, when you will have a chance of getting him to work to your signals. Of course, all the time he has been down you have been giving a signal, when you could, by a wave of the hand, to make him cross backwards and forwards in front of you. I often find by sticking too close to a pattern in quartering at first, your dog will try to get behind you in trying the breaker more than once, and you will find that you would make your dog come to heel altogether. Should he cross behind you once or twice, when he comes next run forward yourself, and he will run up to see what is up. This will encourage him likewise, and will do no harm. As this is one of the most essential points in dog breaking, great care must be taken with your pupil to quarter his ground thoroughly. It is only to be got by perseverance—keeping at the work every day—that real mastery comes in this part of the training can be done. Should your pupil get too keen, and he is inclined to hunt for himself and not answer the call, drop him when he turns by hand; go up to him and hope you have a few feet of check-cord in your pocket. Attach this to his collar, then take your whistle and blow it, also rating him with the words, "Do you hear the call?" Repeat pulling the check cord, you yourself going after the back, and making him follow you. You must now watch him for signs, as you must for perfect obedience to the whistle. Now, he should be ready to stop at a whistle. If you have many to break, or not much game to take, let him have a little dog out with your young one, and let him get a point. I hope he is steady and stands in good style. Have your young one in your hand; go quietly up, treading lightly, and give him a whiff of the delightful aroma. He may be very impatient at first, but very likely he may stand at once. Some will, others will not, until several days. However, persevere until he does. I myself never take an old dog, but it is the quickest plan. After you think you can depend on your pupil, leave the old dog at home, and give him a chance for himself. Let no attendant or anything be near you to take off his attention, and I hope he may stand his first point well. Should he not do so, mark down the first brace of birds you can for him. Now put on your check-cord when not far from them. Then bring him round and get near the cord when he winds them; allow him to get well out from you so that he thinks he is by himself. Should he be inclined to run, give him a sharp jerk with the cord, and keep him there for a minute. Then walk gently up and put him in a steady him, and go up with him to his birds, and hope they will lie well to him. But do not keep him too long on his point at this time, as it is the first real one he has had to himself: two or three minutes will be quite enough. As soon as the birds rise drop him at once, say for five minutes, walk round him, still keeping him down. Don't allow him to sit on his haunches. Never allow half measure in anything, and he should know better; that is the great secret and success in breaking. For you have him so that you can depend on him, take your old dog again, which I hope is a good backer, so that your young one may get a lesson, as nothing is more beautiful than a dog to back well, and some are very difficult to learn, others doing it naturally. If the old dog is a kennel companion, so much the better. The young one will not be so jealous in this, as by this time he will have great confidence in him. Let the old dog lead him, or if you like they can have a run separately to begin with, and when you cool their heads before being down together. We now suppose they are both down; have a short cord on your young one, so that should be required, he can be pegged down. Should the old dog find first, get it possible betwixt him and the young one, and by any means stop him by holding up your hand and using the word "Yoho." Keep him by standing still. Advance yourself to the old dog, still keeping your eyes on him and your hand up. Should he advance, as he likely will, go down and put him to where he stood first and peg him down, or you may let him down without the peg for the first few times, retreating with your face to him. I only hope the weather is fine, if spring and birds lying well, which will give you time for all this. Now spring your game, still keeping your young dog down; also the old dog for ten minutes if you like. Bid the old dog hold up till he looks where the birds have been, still keeping the young one down when he comes and start again. Now let the breaker take care that the old dog does not get all the work, as he will soon discourage your young dog as making him perform all the backing. He will soon be going in the wake of the old dog, depending on him finding the game; only I hope your young one will prove, if not so sure in nose, flecter of foot, which will give him a chance of a point now and again. Or, supposing you have two young ones, you will have a better chance of them getting equal points. Be sure to cast off your hand, and let the other to the left, each time you have them down, by turning them this way and that, and let them know you are not so jealous as I have often seen them let down together; and instead of who will find the birds which will run the fastest, and go right into the covey and chase them, all through jealousy and high spirit. Don't whip for this: only rate them, as you yourself was to blame for this, as they will only do so for the first turn or two. I once had a brace of birds, and white setters I broke in 1871 that quartered their ground, and when they were to the right, and each kept their own to the right, it for some curiosity, and found it could be done easily. So much for patience and perseverance; always bearing in mind that there is a good understanding between you and your pupils by kindness if possible; and be with them at exercise and feeding time if you can, so that they get well attached to you. But when necessary to apply the whip,

let it be done firmly and don't flinch from your duty: it will save your pupil from many smaller and larger beatings afterwards. Some are always whip-whipping; that of itself would spoil a dog. This mostly applies to high-couraged ones, and many of the wilder type give the most trouble, and must be left a good deal to the discretion of the breaker. As for instance, many a shy dog that will scarcely stand a look of the whip at the kennel, will in the field, for an act of disobedience, take a fair share of it, and rather improve him of his shyness than otherwise, always bearing in mind never to leave him until peace is made up between you. It is also essential that you keep at them every day, as they are quick to learn and as soon forget when only half way with their master, and in the end too much for yourself, for they quickly discern right from wrong, and who is their master. Nothing to my mind is more beautiful than a brace of dogs who quarter their ground thoroughly. This is only done by perseverance and using the signals of waving the arm across you, but to hark back when you throw off your brace of young ones. When they get their point, get up to them as quickly as you can, and if not well up to backing by this time—or some will do so naturally—have an attendant, and let him go up to the dog who has the point, and go yourself to the one who backs, as he will require most attention from you at this time. Go behind him and steady him. Should he not get into stiff, good form, advance a step with him until he gets a whiff of the game. Then keep him there if possible in his position. Let the attendant spring the game with the other dog. Then drop them. After a few minutes, sign to the attendant to go on with the dog to see if any are left, you still keeping your dog down until he is satisfied there are none left. Repeat this until you are perfect. Another thing, do not depend too much for some time on either of them, but keep a strict watch on both, as until the second season very few young ones are to be depended on. Should you not have had the luck to let them see many hares, be careful now when one gets up, or you may have a deal of trouble. If you cannot depend on them, take the first chance when you see her to shout at the top of your voice, "Ware hare! ware hare!" and hope you are not far from them; but stop them by any means, or they may have to go back again in your work, and only let the one dog out. This would be awkward, for if once they get a beginning with fur they are difficult to stop; only you must apply the whip properly now, as this is the worst vice he could have, and nip it in the bud. I have departed a little here, as it is very necessary to instill this most essential point on the breaker—as what chance would one have with a dog that would chase even a few yards at a field trial? although some of the judges are not altogether consistent there, as I have heard of one saying that only about a half a yard, and the next brace chased out of the field and were not put out, although neither showed great merit to keep them in the hunt. Now I think the rules ought to be strict, and let every one have the same fair play for his money; and let it be binding that a chase of any sort be thrown out, as I think, now that so many are entering for field trials, we must look for higher standard of work, and therefore stricter rules. I shall now give a list of words used for breaking the dogs—"Go on." Hold up your arm and pointing it to the right or left. "Lie down." "Down charge," or "Down." Holding up the hand on springing birds: "Have a care." "Ware springing birds." Leading him back to where he should have stood them, using the words "Soho! steady!" On fur "Ware hare!" at the same time drop him and take him off the line of her. By attending to these simple rules, the young breaker will, I have little doubt, have little trouble with perseverance in turning out a good puppy.

The information contained in the above article is, we think, most valuable, and likely to be of service to beginners. As any special features in the education and breaking of various breeds will be attended to, in the articles referring to these varieties, we do not propose to add any further remarks on breaking to the present chapter.

PENNSYLVANIA FIELD TRIALS.—Pittsburg, Pa., Sept. 26th.—*Editor Forest and Stream:*—The following account of the Pennsylvania State Field Trials Association was had at the meeting of the association, held here on the 18th inst. Inasmuch as the date fixed on at a previous meeting seemed to conflict with the N. A. K. C. Trials, it was unanimously resolved to change the Pennsylvania Trials to the 26th, 27th, 28th and 29th of October. The prizes in the various stakes are as follows:—

All-Aged Stakes.—\$100 to the first, \$50 to the second, \$25 to the third; \$10 entry, \$5 forfeit; entries limited to 35 entries.

Puppy Stakes.—\$50 to first, \$25 to second, \$15 to third; \$5 entry, \$3 forfeit; entries close with 25 entries.

Nursery Stakes.—Same as Puppy.

Association Stakes.—A piece of plate worth \$100, to be selected by the winner: entry, \$10; to be forfeited if not run.

All entries close Oct. 26th, or on receipt of the limited number of entries in the several stakes.

JOHN P. BARNARD, Secretary.

[Unfortunately the above was received at too late an hour to be published in last week's issue.]

A LETTER FROM MR. JOHN E. ROBINSON ON LAVERACKS.—*Glen Villa, Ashbrook Range, Sunderland, England, Sept. 1st.*—*Editor Forest and Stream:*—I was very sorry indeed to learn the "sad and miserable" end of Pride of the Border. I have enjoyed many a pleasant day's shooting over him, and can indorse all you state about his good qualities as a field dog and also as a sire. I wish to inform you that "Pride" was not got by "old Blue Dash," but by "Fred II," which I am able to prove by the English Kennel Stud Book and also by my old friend (E. Laverack) own hand writing; how it is that Pride is entered in America as by Old Dash, I know not, but I have told several gentlemen in America that it is a mistake. "Fred II," was by "Fred I" out of "Belle II," (see Stud Book 1372) and of course was as well bred as any setter in the world, and although a sterling good dog in the field, yet not near so good as "Fairy," and how it is that "Fairy" has been taken for a field dog, since she arrived on your side of the water, is beyond my comprehension, unless it is that she was too fast for your sort of country; at any rate on the Scotch moors she could beat Pride hollow; the latter was more of a partridge dog,

not being able "to go the pace," nor could he last anything like the bitch, he being too heavy and early, especially for his breed; however, he has maintained the reputation and value of pure bred setters, by the quality of his stock (out of pure bred bitches), and now that "Fairy" has gone, I regret more than ever the loss of "Flambeau," which I sent to New York to take his place, and also that of "Pedigree." Had "Flambeau" lived, I believe he would have made the handsomest setter that ever crossed the Atlantic, and I would advise setter breeders that have pure Laverack bitches (especially blues), to breed them to an "Aldershot," own brother to "Flambeau," being by my "Emperor Fred" out of Blue Cora (the late E. Laverack) by Blue Prince out of White Cora by Dash-Moll.

JOHN E. ROBINSON.

ST. LOUIS DOG SHOW.—Dr. J. S. Niven, of London, Canada, has consented to act as Judge on spaniels, hounds and non-sporting classes, at the Bench Show at St. Louis.

ROCKAWAY HUNT.—Meets for October, 1890. Each date at 4:30 P.M. Saturday, Oct. 2d, at Kennels, Saturday, Oct. 9th, at Lawrence Point, Saturday, Oct. 16th, at Valley Stream, Saturday, Oct. 23d, at Wave Crest, Saturday, Oct. 30th, at Rockville Center.

J. D. CHEEVER, M. F. H.

IMPORTED DOGS.—*Colorado Springs, Col., Sept. 21st.*—*Editor Forest and Stream:*—I have recently imported from England a fifty pound bull terrier dog, also a wire-haired Scotch terrier bitch. I have also purchased from Mr. Owen Doyle, of Chicago, Ill., his famous bull terrier "Jack."

C. W. CURTIS.

MR. HERZBERG'S KENNEL.—A letter from Mr. Herzberg informs us that he intends passing some time away from home, and that he expects to devote much of his time this autumn in the field. Mr. Herzberg left Brooklyn last week, taking with him Aldershot, Patti and Polka. Boska will be sent to him about Oct. 1st, when she will have weaned her litter. Aldershot will not be in the public stud until the middle of December, and then only to approved bitches. We wish Mr. Herzberg the best of sport, he certainly has the tools for it.

FIXTURES.

Pennsylvania State Field Trials Association Trials, Lancaster, Pa., Oct. 26th, 27th, 28th, and 29th. J. R. Stayton, Secretary, Pittsburg, Pa.

National American Kennel Club's Second Annual Field Trials, Vincennes, Ind., Nov. 15th. Chas. De Rougé, Secretary, 51 Broad Street, New York.

Eastern Field Trials Club's Second Annual Trials, Robins Island, Peconic Bay, L. I., Nov. 23. Jacob Pentz, Secretary, New York.

KENNEL NOTES.

SALIS.—*Daisy.*—Mr. A. H. Moore has sold to Mr. C. E. Lewis his liver and white cocker bitch Daisy. *Norma.*—Mr. A. H. Moore has sold to Mr. T. Goodsell his black, white and tan English setter bitch Norma, out of Nellie by Dan. *Betty.*—Mr. Chas. Downing has purchased from Mr. A. H. Moore his Irish setter bitch Betty, by Stoddard's Bob out of Herborn's Kitty. *Yell.*—Mr. A. H. Moore has sold to Mr. John S. Fox his Gordon setter bitch Yell, by Bruce out of Smith's Daisy. *Bob-Mona.*—Whelp—Mr. A. H. Moore has sold to Mr. Robert Jack, Bob-Mona setter puppy, by Bob out of Mona. *Bob-Mona.*—Whelp—Mr. A. H. Moore has sold to Mr. E. P. Wilson, Gordon setter puppy, by Bob out of Mona. *Danah-Belle II.*—Mr. A. H. Moore has sold to Mr. Chas. Budd, pointer puppy, by Donald out of Belle II. *Bud-Mona.*—Whelp—Mr. Oscar Wilson has purchased from Mr. A. H. Moore, Gordon setter puppy, by Bob out of Mona. *Daisy II.*—Mr. Robert Walker, of Frank, Delaware County, N. Y., has purchased the cocker spaniel bitch Daisy II, from Mr. C. E. Lewis's Suspension Island, N. Y. Daisy II is in whelp to Mr. Moore's imported champion, cocker Charlie, winner of ten first prizes. *Quick Bess* and *Lodder-Rory O'More*, whelps—Rory O'More Kennel (W. N. Callender, Albany, N. Y.). The following pups, by champion Rory O'More out of Queen Bess and Lottia, one to Mr. C. Spahr, Bridgeville, Pa.; one to Mr. P. Gilsey, Good Ground, L. I.; one to Mr. M. L. Norton, of Greenbush, N. Y.; one to Mr. E. L. Seelye, of Stamford, N. Y.; one to Mr. J. B. S. Holmes, of Rome, Ga.; one to Mr. W. H. Pierce, of Peekskill, N. Y.; one to Mr. J. C. Vance, Chataqua, Tenn.; one to Mr. E. L. Remlett, of New Orleans, La.; one to Mr. C. H. Burton, of Peekskill, N. Y.; and one to Mr. David Stanton, of Albany, N. Y. *Reut II.* and *Pep-Mr.* E. F. Merditt has purchased from Dr. John H. Meyer his black pointer puppy Rena II, and from Mr. W. H. Beadle the imported prize pug bitch Pep.

IMPORTED CHAMPION BUILDINGS.—*Bacon Kennel, Boston, Sept. 26th.*—I have received, this date, from James William Berris, Esq., Portland Building Club, London, England, two champion bulldogs, dog and bitch. To be slangy, "they take the cake."

JOHN P. BARNARD, JR.

NAMES CLAIMED.—*Thorn.*—Mr. J. C. Bishop, Monton, Maine, claims the name of Thorn for English hare beagle bitch, whelped June 11th, 1880, out of Lucy by Victor, purchased from N. Elmore, Granby, Conn.

WHELPS.—*Della.*—Mr. H. W. Livingston's black, white and ticked setter bitch Della, whelped, August 15th, five puppies, four dogs and one bitch, by same owner's champion fairy. *Fairy.*—Mr. Robert Sewell's Irish setter bitch Fairy, whelped, at Tarrytown, N. Y., Sept. 18th, twelve puppies, four dogs and eight bitches, by owner's red dog Rex. *Peggie Royal.*—Mr. W. A. Coster's liver and white Dilly pointer bitch Peggie Royal, whelped, on Sept. 23d, ten puppies, six dogs and four bitches, all liver and white and healthy and strong, by owner's Don Royal.

BRED.—*Fanny-Rufus II.*—Houston Kennel Club's (Texas) Fanny, to their Rufus II.—Rufus-Viend. *Kate II.*—Aldershot—Mr. E. A. Herzberg's imported black, white and tan English setter bitch Kate II, (own sister to L. Purcell's Llewellyn's Dash II) to owner's imported Laverack Aldershot. *Lou-Mona.*—Mr. Robert Sewell's cocker spaniel Lou to Dr. Wyeat's Musie, on Sept. 14th. *Rory O'More.*—Mr. Francis H. Meyer's imported red Irish setter bitch to champion Rory O'More. *Lottia-Mona.*—Mr. Robert Sewell's orange and white imported cocker spaniel Lottia to Dr. Wyeat's Musie, Sept. 12th, 1890. *Jessica-Dirk Hatterack.*—Mr. E. J. Robin's red Irish setter bitch Jessica to Dirk Hatterack, Sept. 14th and 15th. *Bridget Plunket.*—Mr. E. J. Robin's Bridget Plunket to Dirk Hatterack.

or five feet deep, would gladden the heart of any angler, and he would be gloating over his prospective pound trout before he would wet a line. But after a number of casts, and raising no larger trout than six inches, he will be overjoyed at the landing of an eleven-inch fish, weight about seven ounces. The angler will be in a trap as the north and south forks were caught last fall, in a trap set below the junction of the two forks, which form the main stream. There were small hopes of any success after learning of this lawless practice, as it is a well established fact that trout always return to the same stream in which they were bred. Experienced the best success in the south fork, catching twenty-five trout, weight five pounds, the largest being eleven inches in length, all taken with the fly. This was by no means up to my expectations, which would not have been satisfied with anything under a pound trout, but this is the disappointment all amateurs are subjected to. The fish in Laurel Run seemed to be very small, and few and far between. A rather peculiar discrimination in the movements of the flies by the trout attracted my attention.

The fish in Laurel Run would never take the fly unless it was being, of the stream, while those of the north and south forks of Cherry River invariably take it when drawn against the current. Last year, in July, I found it impossible to induce a trout to take the fly by drawing it through the water. They would leap at it while still in the air, or just as it was about to touch the water, but as soon as it struck the surface of the water they would detect the deception, and all the most natural movements I would give the fly would not tempt them to take it. I supposed the very low and clear water at that time was the cause of this, as I had no trouble to induce the few trout that were in it the following year to take the fly by drawing it down stream. The white miller, pheasant, dotted dun, cinnamon and yellow hackle were found to be the most taking flies. I encountered my first rattlesnake at Cherry Tree Bottom. Returning to C. T. B. from Laurel Run by a narrow road cut in the side of the mountain, about 1 P.M., I was suddenly awakened from my pleasant thoughts by a loud rattling, resembling the music of a locust—thought it was a locust, but my innate dread of snakes induced me to stand perfectly motionless the instant I heard it and try to place it, in which I did not succeed very well, as I had supposed it issued from a clump of bushes about five feet to the right of the road, but I was convinced that that supposition was wrong when I saw a yellow rattlesnake sunning itself on a sandstone rock in the center of the road about fifteen feet from me. I immediately commenced to attack it, for the reason that the road was too narrow to allow me to pass it safely, I commenced to throw rocks at it, and after throwing about twenty I managed to hit it, inducing it to crawl away. It had kept up a continual rattling from the moment it discovered me until I had struck it with the rock, when it became perfectly silent. Advancing a few feet, and at the same time carefully examining the side of the road, the snake had disappeared. I was now thoroughly frightened at seeing the rattlesnake in a coil, with its head in the centre, ready to strike the moment I came within reach of its poisonous fangs. Hastily stepping back, I again commenced to attack it with rocks, and at last succeeded in driving it up the hill, where I obtained a good view of it, and judged it to be about four or four and a half feet in length and about one and three-quarters or two inches in diameter. This was the only time I saw a rattlesnake, with four snakes mistook the singing of a locust for the rattle of a snake, caused by the remembrance of my first encounter.

Being within about ten miles of Hew Mountains, I concluded to try the fishing of the Cherry River at that point, where trout had been caught last year to the length of eighteen inches, and securing a guide and his son as companions we managed by riding, walking and crawling through the dense bushes to reach the river. My guide selected a small hillside, with four small trees at right angles, and commenced to build a camp by trimming the trees, leaving a V notch on each at the junction of two branches, across which he laid two poles. The next thing to do was to get a roof for our frame, and selecting some small and rather juicy trees about a foot in diameter, he notched with an axe a circle at the bottom and another about five feet above the lower one; then cutting a straight notch between the two circles, which he inserted the axe and wryed off the bark, he then proceeded to lay the plates of bark across the poles, and weighted them with rocks to prevent the wind carrying them away. It was only at night that it occurred to me that it was dangerous to be in these mountains, containing a few panthers, plenty of wildcats and bears, with no inhabitant within ten miles, and two perfect strangers as companions. But this is by no means a complaint of any guide and his son, but simply attributable to my cowardice and strange surroundings, which is partly excusable owing to the fact that it was my first night spent in such a wild country. Camping out, even if it did limit my sleep, increased my appetite, and corn pone, honey, butter, bacon and trout fried in the fat extracted from the bacon by frying, comprised our breakfast, and though it would cause me to sneeze at it here in the city, I never enjoyed a heartier breakfast, served in no other manner than on bark plates, which I advise everybody to make use of when camping out.

Result of two days' fishing, eighty trout, ranging from four to eight inches, all taken with the fly. The average size of the fish not being satisfactory, and feeling the lack of civilized accommodation, I returned to C. T. B., attending two days and two nights in the Hew Mountains.

Anybody desiring a good guide for hunting or fishing in this region can do no better than to employ Mr. James Mullen, whose charges are extremely low, and who is perfectly at home in these mountains, as he spends a larger part of his time in them in search of game. The Hew Mountains abound to a fair extent with bears, wild cats, deer and turkeys, while pheasants and squirrels are without limit, and an occasional panther is seen. My second fishing tour to C. T. B. was not commenced with as great expectations as my first, consequently I was not as fully disappointed. I was in luck to catch anything larger than eleven inches, as I had been at the beginning of my first day's trout fishing. Fortunately, or unfortunately, I had made up my mind to return to Kanawha Falls about fifteen hours previous to a very heavy rain, which caused Cherry River to raise five feet in twelve hours; unfortunately on account of being detained for some time at Gauley River, which was swollen to such an

extent as to make it impassable to the clumsy ferry boat, guided by oars, used to take horses and wagons across the river. The fishing of this trip was by no means up to my expectations, but taking into consideration the health gained and the small expenses incurred, I by no means regret it. The horsebackride can be shortened about twenty miles by starting from Roundwete (on C. & O. R. R.), Cherry Tree Bottom being due north of it. It is better to hire a horse for the entire length of time that one intends to stay, the charge of pasturing being very small. The total expense of a three and a half weeks' trip was as follows:—

Horse hire for twenty days	\$10.00
Round trip to K. F. from Cincinnati	12.00
Two days one-half weeks' accommodation for myself and horse at C. T. B.	10.00
One week's expense at K. F. from Cincinnati	5.00
Incidentals	8.00

This is a very pleasant and cheap trip for anybody who is satisfied with a fair number of trout, and whose means are limited, and more information is required by any sportsman wishing to visit C. T. B. or Hew Mountains, I would refer him to A. Spencer and James Mullen, of Cherry Tree Bottom, Nicholas County, W. Va. They will be happy to give all the information possible, and be willing to accommodate a limited number of anglers or hunters. A map of the State of West Virginia, published by G. W. Colton & Co., New York city, is extremely useful to the angler, it being the most minute map of that State published. I mention this only to accommodate the sportsman, as I found it impossible to procure one in Cincinnati, and was compelled to send to New York for it.

A. W.

MENHADEN MOVEMENTS—A NEW THEORY.

THE following letter, written by Capt. Terry, proprietor of the South Bay Oil Works, situated just east of Fire Island Light, to Prof. Baird, has been given us for publication. Capt. Terry's long experience in the capture of menhaden entitle his views to careful consideration.

Prof. Spencer F. Baird, United States Fish Commissioner:—

Dear Sir: I met, by invitation, with the United States Oil and Guano Association, at the United States Hotel, on the 14th of January, 1890, and had the pleasure of hearing the address of Prof. Goode, on the menhaden question, as the time when they make their appearance on our coast, and where they haul for their needs, and the cause of their not reaching as far as the coast of Maine last year; also their food and the various causes of the scarcity at certain seasons of the year at different places on the feeding grounds, etc., etc., all of which I listened to with great interest, and the greater part of which I could assent to.

As to the fish leaving the entire coast line, in that part of the season from Cape Henry to the Vineyard Sound, where they should be the most plenty, he could not, or did not, give any particular reason. I have been in the fishing business for the last sixteen years, first as part owner of the Whig Inlet Oil Works, and lately of the South Bay Oil Works (formerly owned by Wall's Sons), situated at Fire Island, in the Great South Bay. For the first ten or twelve years the fish made their appearance with about the 15th day of April, entering our sounds and bays as scattering fish, and could only be taken by set nets, or hauling seines on shore, the water being too cold for them to sional up or show on top of the water until about the 1st of May; from that time purse nets commenced to take the fish out in the ocean. The fish would remain on our coast so as to be a profitable business until about the 20th of September, and then the summer would leave our coast for the season. On or about the 20th of October the fish would again make their appearance, and were what we would call the fall or main fish, and were very fat, and would continue with us until Dec. 1st, or until severe cold weather set in. In all this time the feeding ground for the menhaden was from Cape Henry to I know not how far eastward of the coast of Maine, taking in all the sounds and bays along our coast, with no molestation, except at the following places, viz: first, only commencing at Cape May, and extending to the fishery in the Chesapeake Bay, Virginia, say about ten miles in extent; at Cape Charles; then about twenty miles at and near Cape May; then about ten miles at Great Egg Harbor; then from Long Branch up to Sandy Hook, and thence across to Long Island and as far east as ten miles east of Fire Island Light; then in Gardner's and Peconic bays and across to the coast of Connecticut and Rhode Island. Further east I have no positive knowledge. So you will see that but a very small part of the feeding ground for the menhaden fish was in any way interfered with, or fish taken with the purse net, from Cape Henry to Montauk Point, and the habits of the fish, from year to year, was very uniform; but for the last few years a great change has taken place. The menhaden catch began to fall off in Maine, and has resulted in an entire failure of the menhaden catch in the fishery in the Vineyard Sound in the season of 1879. And that is not all, for the fish has for the last few years left our coast, south side of Long Island, from four to six weeks in the summer season, at the very time when we used to have about our best fishing, and factories have had to be closed up more or less of the time from Barren Island to and including Gardner's Bay.

My reason for all this is, that so long as the fish had almost the entire coast line, and the greater part of the sound and bays, unmolested, for their feeding ground the entire season from April to December, they would remain on the coast, and near the land, in shallow water. That is, they would strike the coast near Cape Henry, and follow it (somewhat like the mackerel) until they reached Eastport. And still further east and north, some remaining all along the coast, so there would be fishing the entire distance, excepting at short intervals, from the commencement of the season to its close. But for the last few years the entire coast line, from end to end, has been run over almost every day by the fishing vessels, and the fish have had no chance to remain in any one place for any length of time, but are continually harassed from morning to night every day, until they are forced to leave their old feeding ground, and are only to be found, as some supposed, some thirty to forty miles

off from the land and in deep water. I know that it is said that the temperature of the water, as far west as Boston Bay in 1878 and 1879, has been so cold for the menhaden to migrate further east; but I think there are other causes to account for it, such as stated above.

You will observe that until within the last few years, only sailing vessels were employed in the menhaden fisheries; but fast sailing steamers have been put into the business, so small in numbers at first as not to be perceptible. But in 1878 the number was 64, and in 1879 there were 81; and with all the catch of fish to be 296,389,000 less in 1879 than on 1878, and the cry is that still the steamers come. To sum up the whole matter, in my opinion, the fish need, and must have, some portion of the feeding ground left to them unmolested by either sailing vessels or steamers engaged in the purse net fishing. Has not the fishing for menhaden all along our coast been so conducted, or carried on by those engaged in the fisheries that, although we have not killed the goose that lays the golden egg, we have in a great measure broken up the roosting place and nest, and compelled her to find a safer place to rebuild her nest for future use?

Seyville, L. I.

W. J. Terry.

SCHURTZEN NOTES.—The New York Schurtzen Corps is the ablest organization of the kind in America, and is comprised of our best citizens. Their membership is very large, and all work in harmony under the captainship of Major George Aery. The New York City Schurtzen Corps is an offspring of the above-named corps and is also composed of good men, but bears no comparison with the original corps.

PUBLISHERS' DEPARTMENT.

—The Hotbird Shooting and Fishing Suite. Uprightgrove & McLellan sole manufacturers, Valparaiso, Ind. Send for circular.

—Mr. Garrett Rauch advertises a few pointer puppies from the celebrated stock champion Rush-Queen II. Now is the chance to secure a good dog. See advertisement.

Answers to Correspondents.

☞ No notice taken of Anonymous Communications.

R. S. L.—See our game columns.

J. A. G. Mattewau, N. Y.—You can procure the book from us; price \$2.

M. S. F. Charleston, S. C.—You will find an answer to your Dittmar Powder inquiries in our issue of last week.

M. L. A. Yonkers, N. Y.—The law permits robin shooting after Oct. 1st, in this State. Your other questions have been answered already. See last issue.

L. W. F. Middleton, Conn.—We do not buy guns for outside parties. You can find just what you want by writing to our ad writers.

L. E. W. Hay's Corner, N. Y.—The pistol is made by Pittsford Arms Company; price, about \$1.50 retail. 2. Flobert rifle, price \$7.50 to \$10. 1. A good deal used in galleries, etc., 1. 100 feet.

NEW YORK.—Your postal headed. We had already taken cognizance of the fact complained of, and had set about remedying it. There can surely be no complaint of last issue on that score.

READER, Baltimore, Md.—Will you be kind enough to inform me whether, after one night, it would be safe to stay several nights in a very malarious district? Ans. One severe frost is generally sufficient to destroy the germs of malaria.

C. D. B. Newmarket.—Will the use of chilled soil injure a gun? The question has been raised before, and I write for information. It is difficult to tell, but it is not safe to mark a gun that is not shot, but it cannot, we think, injure the gun in any way.

G. S. New York.—All three were right. There is no test by which we can decide that one make is more durable and accurate than another. Discussions of this kind are prompted by individual preference for some particular style of arm, and no argument can convince a man against his will.

J. F. L.—The squirrel question was discussed at great length in FOREST AND STREAM two years ago, the conclusion being, as summed up by us in the issue of March 21st, 1878, that more facts were necessary to substantiate the opinions advanced; and the question was closed by our opening our columns only for the admission of further evidence than was then proffered.

E. L. D. Rockland, Maine.—We would suggest that you send for the free articles on dog breaking, which appeared in the FOREST AND STREAM a few months back. They will tell you all you want to know, and in a very few words. We are pleased to say that they have the indorsement of Dr. C. A. Packard, President, Sagadahoc Association for the protection of game and fish, at Bath in your State.

H. G. W. Virginia.—I have a setter dog eighteen months old, and he had the distemper when six months old, from which he did not recover for several months, during which time he was almost covered with yellow blisters, but never discharged from nose or eyes. Since he recovered he has always shown the same symptoms when given any exercise. Try Dr. Glover's imperial manure cure, advertised in another column, and write results.

A. P. K. Boston, Mass.—I have a setter bitch now about ten or eleven months old which seems very healthy and strong, but ever since she was large enough to run with any strength she has had the habit of drivelling at the mouth, although I cannot say that it does her any harm. Will anything stop it? She has not had the distemper. Ans. Keep the digestive organs healthy, give plenty of exercise, and in the course of time the habit may correct itself. There is no specific remedy for drivelling.

C. E. T. New York.—Can you inform me through your valuable paper how to dress a deer's hide to make it soft and pliable? Ans. Take soft water, about ten gallons, one-half bushel wheat bran, seven pounds of salt, two and a half pounds of sulphuric acid. Dissolve altogether in the skin in the solution and allow them to remain twelve hours; take them out and clean them well, and again immerse twelve more hours, or longer, if necessary. The skins may then be taken out, well washed and dried. They can be beaten soft, if desired.

P. M. D. Metuchen, N. J.—My setter puppy, five months' pups bark and howls on the chain and when looked up in the kennel. What shall I do to remedy this? Ans. In the first place, no young puppy should ever be punished by being chained. For many reasons all young dogs should have their freedom. If you will switch the dog every time he commences to make a noise, and tell him

to be quiet you will find a few such lessons will be all that are needed.

I. S., Reading, Pa.—I have a Ballard rifle, and in order to give it a finer appearance I thought of having the whole breech-block nickel plated. By so doing do you think it would make a strong reflection, or dazzle the eyesight so as to interfere with the shooting? I see many revolvers done up in this way, and they make a very fine appearance. Ans. The rifle would look gaudy enough with the side-plating and trigger-guard plated. Beyond that any plating would be a positive injury.

S. L. A., Boston, Mass.—My Gordon setter bitch has been paralyzed—the cause, distemper. She is now just getting the use of her hind legs. Would you give her a tonic, or is good food all very good? She has recently passed some worms. Will it do to physician her, or had I better wait? She has a good appetite, and I am feeding her on milk, bread, corn meal and meat, cooked together. Ans. Give your bitch two grains of quinine and one-eighth grain of nuxvomica three times a day. We would also suggest administering two doses of calomel, five grains each, eight or ten hours apart, followed by a tablespoonful of castor oil. Avoid feeding the milk.

R. E. E., Buffalo.—My cocker spaniel had a slight touch of the distemper about six months ago, and I gave him the preparation as you directed, and he seemed to be perfectly well, but since then I have noticed that he is partially blind, and when I throw anything for him he loses sight of it and will sometimes go within three feet of it without seeing it, but if he gets the scent of where it struck he will find it right off. I think that it is the effect of the distemper. If I am right will you please advise me what to do? Ans. The blindness, of course, is the result of distemper. Time and constant attention to the dog's general health may bring him about all right. Give two grains of quinine three times a day.

C. F. S., Rome, N. Y.—Where can I get reliable information concerning mackerel fishing, say for a summer's cruise? Ans. The form of question hardly gives us an idea of your wants, but mackerel fishing is more or less good at times in Long Island Sound and up to Maine. The spring and summer runs are often numerous, but are seldom fat. The best fish are caught in October. It is impossible to give more exact information concerning a migratory fish which comes in immense numbers at irregular times and at others is scarcely seen. By inquiring at the different points on the sound, of the fishermen as you go, you can learn of their probable whereabouts, numbers, etc.

D. A. W., Fort Wayne, Ind.—During a recent trip through Colorado and adjacent territories I heard, from the sportsmen and travelers, considerable regarding the mountain lion, its great size and ferocity, etc. I am unable to decide to my own satisfaction where the varmint belongs. Is it not like the variegated of California, an overgrown species of the American jaguar or panther, the "Felis onca of Linnaeus"? Ans. The size and ferocity of the mountain lion is often exaggerated, but at the same time it is not a pleasant animal to have to do with at close quarters. In different sections it is called variously panther, puma, cougar, mountain lion, and by naturalists *Felis concolor*. A large cougar stands as high as a large dog and weighs about 150 pounds.

L., Rhinebeck, N. Y.—Will you kindly decide this wager and oblige an old reader of your valuable journal. A. B. and C. go ruffed grouse shooting, one afternoon. A. wagers C that he will kill a brace of birds. A and B make a party shot and kill a grouse. A and B shoot together again and kill a second grouse. A shoots alone at another grouse and kills it. Does A win his bet to kill two birds. Ans. I can prove that in the party shots his shot killed the birds, but I did not, he can claim the wager. But if we were C, we should make him prove this before paying. Perhaps the only way to satisfy both parties would be to dismiss the case and adjudge that B pay all costs.

H. P., Providence.—Will you kindly inform me in which of the two trout I would find the best fishing and shooting; first, Conn. trout lakes, reached by way of Megalloway River, Parmachenee Lake, etc.; or, second, leaving Mattawamkeag, on the east branch of the Penobscot, Milnetook Lake, Mansungun Stream to Mansungun lakes, Churchill Lake, Eagle, Chamberlain, Mud

Pond, to Chesunook Lake, west branch of Penobscot, Parmachenee Lake and Penobscot River to Mattawamkeag? To whom shall I write for extended information of the two routes as to guides, boats, etc.? Ans. We would prefer the latter. See "The Eagle and other lakes of Maine," FOREST AND STREAM Aug. 28th, 1880, page 65.

CHIHUAHUA.—My setter bitch, eight months old, had the distemper about one month since, but is over it now with the exception of a weakness; in the hind parts, i. e., a kind of staggering when she gets up or stops. When running you cannot notice it, but the moment she attempts to walk slow she will stagger or lean up against whatever is nearest to her; in every other respect she is in splendid health and seems to be as lively as if she had never had any trouble. She had three fits ten days or two weeks since, but an ounce of castor oil relieved her at once. Has not been troubled since with fits; now cold and damp; eyes clear; feed with boiled meat, vegetables and table scraps; boiled rice two times a week. What will cure the above disease? Ans. This is one of the evils oftentimes resulting from serious attacks of distemper. Give one eighth grain nuxvomica and two grains of quinine three times a day.

G. P. M., Oswego, N. Y.—I have a fine blooded pointer dog, two years old last February. He is a perfect beauty, good hunter, very intelligent and all right with one exception. When he was about nine months old I took him out for partridge, and not being able to start any, on my way back I shot a crow. My puppy went out and brought the crow to me with all the pomp and pride of an old retriever. I was out of patience with my dog because it was not a game bird, and I punished him severely. The consequence is he has not brought me a bird since, and I fear he never will. What can I do? Ans. As you do not state whether you have tried him on crow again, it is impossible to answer your query as fully as it deserves. In all probability your dog has been ruined for life as a good retriever by your own indiscretion. We have known a number of dogs ruined in this way. If you are kind and firm, however, and will use patience, he may be redeemed by the careful use of a collar and check-cord, remembering to give your daily lessons before feeding and rewarding with gifts of food each step toward the desired result.

B., Newburg, N. Y.—Can Scotch staghounds be used to advantage in hunting deer in this country? If so, are they as good as our ordinary deerhounds? Is there a breeder in this country from whom I could get one? Ans. The Scotch staghound, as ordinarily trained, follows the deer by view alone, and would therefore be of no use in hunting in this country except on the plains, where the quarry can be kept in sight. They would, moreover, be too fast for ordinary deer-driving, in which it is essential that the hounds shall keep close to the deer, or that the latter shall be very much frightened. Staghounds, it is true, considers that the staghound or rough greyhound, for we presume that it is of this animal that our correspondent writes, possesses nose enough to follow even a cold track. These dogs have been extensively used in both deer and antelope hunting in the West, but have not proved so useful in this sport as have the smooth greyhounds, which have more speed, though perhaps not so much strength. The old English staghound was essentially a larger foxhound, in respect to his head, and had the body like a bloodhound, but somewhat lighter. The English staghounds of the present day are merely a larger and lighter draft of the ordinary foxhound. Staghounds are frequently advertised in our columns, and our correspondent can no doubt obtain one either by advertising or watching our advertisers' cards.

C. W. T., Oakland, Md.—Will you please be kind enough to inform me of the receipt for blueing or blacking rifle barrels; also method of application. Ans. Tincture of muriate of iron, one ounce; nitric ether, one ounce; sulphate of copper, four scruples; rain water, one pint. First plug up both ends of the barrel, leaving one plug in each of sufficient length to be used as handles; then thoroughly clean with soap and water, and when that has become dry remove it with an iron wire scraped brush; this to remove all dirt and grease from the barrels.

Then apply a coat of the fluid with a rag, and let it stand twenty-four hours, when a slight rust will have appeared; then take the barrels and immerse them in a trough containing boiling water, until which scratch them well with the scratch brush. Repeat this after the color suits, which will be after three or four applications. When completed, let the barrels remain in lime water a short time to neutralize any acid which may have penetrated. Take great care not to handle the barrels during the operation for the least particle of grease will make bad spots.

CLIFF.—I have a setter pup, four months old, that is troubled with worms and a very much weakened from confined dysentery. Does not digest his food and his discharges are of a mucous, bloody and watery character. I have given him a tablespoonful of castor oil with ten drops of turpentine to relieve internal pain that caused him to howl incessantly and drag about on the ground. The dose relieved him before morning. That was some two weeks since. I have given him, within the last five days, two small doses of vermicifuge, but as he is very much weakened by diarrhoea am afraid to give him any more. To-day I gave him two grains of calomel, and intend after this, if necessary, to give him bismuth and chalk. Can you recommend any treatment better than this, or give me some idea of his disease and how to cure him? I am a practical hunter, have raised and broken many dogs, but have never had such trouble to raise a puppy before. Ans. Should the diarrhoea continue give injections of one-half teaspoonful laudanum in tablespoonful of starch water. We would advise you to discontinue all purgative medicines and for the present to leave the vermicifuges alone. Give two grains of quinine three times a day, and continue for several weeks, then write result.

FOREST AND STREAM,

A WEEKLY JOURNAL,

DEVOTED TO SHOOTING, THE KENNEL, THE RIFLE, ANGLING AND OTHER FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, AND THE INOCULATION IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUTDOOR RECREATION AND STUDY.

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Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention.

Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

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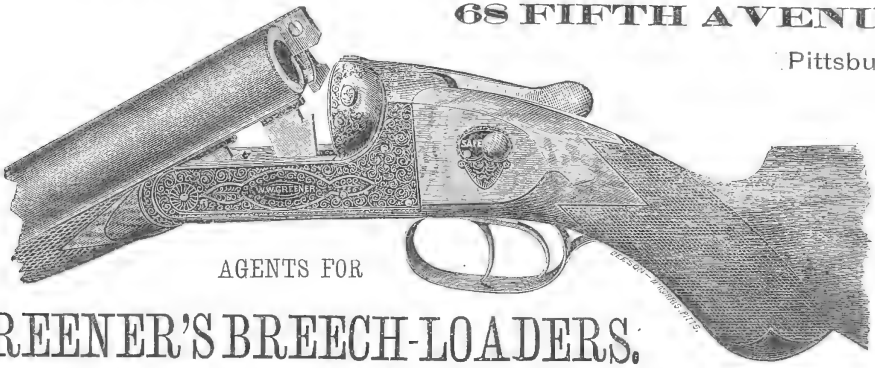
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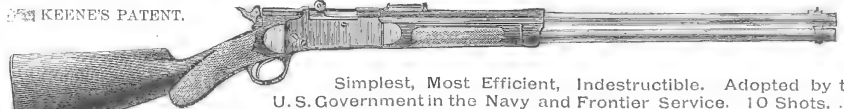
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Field Trials of 1880,

FOR

SETTERS AND POINTERS.

AT FAIRMS OF COLONEL A. G. SLOO,

Near Vincennes, Ind.

COMMENCING MONDAY, NOV. 15th, 1880.

Nov. 15th, Derby Stakes.—For puppies born on and after April 1st, 1879.—Closed with its Entry, \$5 forfeit; \$10 additional for starters; \$300 added money—\$150 to First; \$100 to Second; \$50 to Third, with forfeit; money divided to winners in ratio with added money.

Nov. 16th, Free For All Stakes.—\$500—\$250 to First; \$150 to Second; \$100 to Third; \$10 forfeit; \$15 additional for starters; to close Nov. 15th, 1880, at 8 o'clock, P.M.

Nov. 17th, Brace Stakes.—\$250—\$150 to First; \$75 to Second; \$35 to Third; \$10 forfeit; \$15 additional for starters; to close Nov. 16th, 1880, at 8 o'clock, P.M.

JUDGES.—Capt. Patrick Henry, of Clarksville, Tenn.; Theo. Morford, Esq., of Newton, N. J.; D. C. Burgrudthal, Esq., of Indianapolis, Ind.

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ON

Nov. 29 and 30, and Dec. 1, 2, 3 and 4.

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ALL-AGED STAKES.

Open to all Setters and Pointers. Limited to 50 entries. First prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25; forfeit, \$15.

PUPPY STAKES.

Open to all Pointers and Setters under 18 months of age. Limited to 25 entries. First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, \$15. Entrance fee, \$15; forfeit \$10.

NURSERY STAKES.

Open to all Setters and Pointers under 12 months of age. Limited to 15 entries. First prize, \$60; second prize, \$40; third prize, \$20. Entrance fee, \$10; forfeit, \$7.50.

BRACE STAKES.

Open to all Setters and Pointers. Five braces to run or prizes to be scaled. First prize, \$250; second prize, \$125; third prize, \$50. Entrance fee, \$25; forfeit, \$15.

CLUB STAKES.

Open to members of the Club only; dogs to be owned and hunted by the members making the entry. Prize, a hundred dollar piece of plate, to be selected by the winner. Entrance, 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace Stakes, and entries close on Nov. 16th.

Entries will be received for the open stakes up to mid-day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.

P. O. BOX 274, NEW YORK CITY.

Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

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FOR SALE.—Red Irish Pups by Elcho, out of Peg Wollington (Tipp o' Ruby, Ranger-Ruby), a thoroughly trained, dark red, bitch. These pups have in them the blood produced such dogs as champion Ben, who unites Bench Show with the best field qualities, having the endurance and dash of the Irish, with the caution and staunchness of the English. Address G. C. McCLEAN, Springfield, Mass.

ENGLISH WATER SPANIEL PUPS.—Whelped, Sept. 21, 1880, by J. M. Adreth's Sport, first at second bench show of Massachusetts Kennel Club, in class, "Water Spaniels, other than Irish;" out of imported Lady Frank (Frank-Nell). Pups, \$15 each; dogs or bitches same price. Will be shipped at six weeks of age. Also a bitch pup, liver colored cocker, extremely well bred, out of prize winning stock; full pedigree can be given; whelped June 20th, 1880. Price, \$10. Address J. J. COLBURN, P. O. Box 155, Newton Highlands, Mass. Sept.30,21

FOR SALE CHEAP.—The celebrated mastiff bitch Leah, winner of first prize at New York and Boston shows last season. Address M. RATIBURN, 433 Fourth avenue, New York City. Sept.30-21

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Babylon, 8:35 A.M., 3:35, 4:35, 5:35 P.M. Sundays, 9 A.M.

Col. Pt. & Whitestone, 7:35, 8:45, 10, 11:35 A.M., 2:25, 3:25, 4:35, 5:35, 6:35, 7, 7:35, 8:15, 10:45, 11:35 P.M., 12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M. Fishing, 6:35, 7:25, 8:15, 10, 11 A.M., 2:35, 3:35, 4:35, 5:35, 6:35, 7, 7:35, 8:15, 10:45 P.M., 12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M. For Rockaway, 8:35 A.M., 4:35, 5:35, 7 P.M. Rockaway Beach, 11 A.M., 4:35 P.M. Sundays, 9 A.M. and 6:35 P.M.

Great Neck, 9:30, 10:35, 11:35 A.M., 4:35, 5:35, 6:35 P.M. Saturday nights, 12:15, Sundays, 9:35 A.M., 5:35 P.M. Garden City, Queens and Hempstead, 8, 10 A.M., 1:35, 5:35, 6:35, 7:25 P.M. From Flatbush daily, except Sundays, and from Hunter's Point, Monday, Wed., Fri. and Saturday, 12:15 night, Wednesday and Sunday only from Flatbush av.

10 P.M. Sunday, 9 A.M., 1:35, 5:35 P.M. Glen Cove, Locust Valley, Glen Head and Roseton, 8, 10 A.M., 3:35, 4:35, 5:35 P.M. Sundays, 9 A.M., 6:35 P.M.

Greenport and Sag Harbor, 8 A.M., 3:35 P.M. Huntington and Northport, 8, 10 A.M., 4:35, 6:35 P.M. Sundays, 9 A.M., 6:35 P.M.

Lakeland and Farmingdale, 8 A.M., 3:35, 5:35 P.M. Port Jefferson, 10 A.M., 1:35 P.M. Tuesdays, 9 A.M. Patchogue, 8:35 A.M., 4:35, 5:35 P.M. Sundays, 9 A.M.

Richmond Hill, Glendale, 8:35, 11 A.M., 3:25, 4:35, 6:35, 7 P.M. Monday, Wednesday, Friday and Saturday nights, 12:15. Sundays, 9 A.M., 6:35 P.M. Creedon, 10 A.M., 1:35 P.M. Tuesdays, Wednesday and Saturdays commencing April 30.

HUNTER'S P.T. & WALL ST. ANNEX.—Leave Pier 17, E. R. (foot Pier), for Hunter's P.T., 1:30, 11:20 A.M., 3:10, 4:10, 5:10, 6:10 P.M. For further information, tickets, commutation, etc., apply at 223 Broadway, cor. Barclay.

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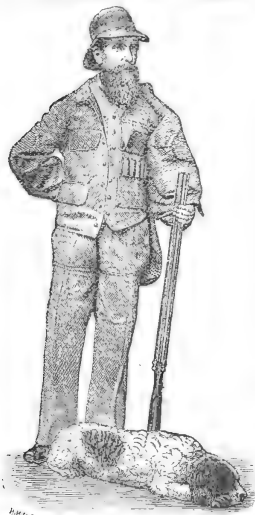
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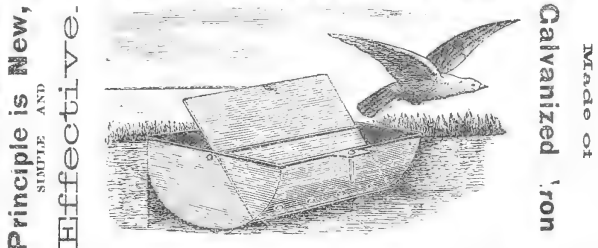
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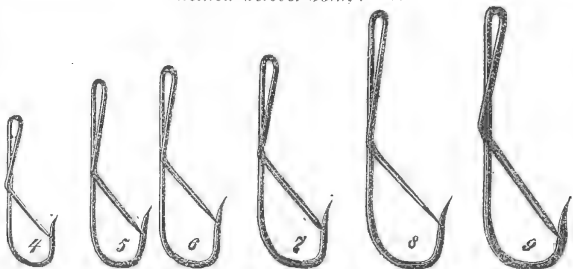
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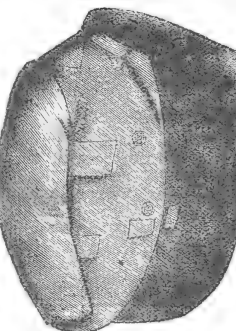
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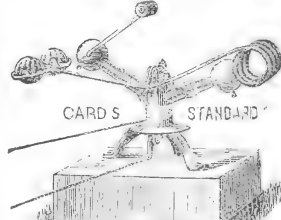
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FOREST AND STREAM.

NEW YORK, THURSDAY, OCTOBER 7, 1880.

APPRECIATED.—We publish elsewhere, as an indication of the popular sentiment on the subject, some of the letters which are coming to us indorsing our course in respect to the "Dittmar Sporting Powder." Indeed no other course was open to us. Having fully satisfied ourselves of the peculiarly dangerous nature of this compound, we could have done nothing else than just what we did, namely, publish the facts fully and fearlessly. To perform what we believed to be our duty in itself sufficient satisfaction. The assurances that our action is appreciated gives us added gratification.

FISH OUT OF WATER.—It is well known that some fishes can exist out of water for a long time, and many instances are upon record of carp, catfish, fresh water gars and others which have some way of keeping the gills moist, and so are enabled to breathe our atmosphere; but we now have to record an instance of a fish being shipped by rail a long distance, and arriving there alive and safe. During the past summer Col. McDonald, of the U. S. Fish Commission, while pursuing his investigations for the census of the fishery interest, happened, while in Alabama, to obtain two large buffalo, *Bubalichthys urrus*, from the Alabama River, which he wished to send to the Smithsonian Institution, and thinking that it might arrive in better condition if left alive as long as possible, he packed in the Southern or "Spanish" moss, and delivered it to the express office at Montgomery, where it lay twelve hours before starting. Exactly how much time elapsed between the taking of the fish from the water and the opening of the box in Washington we do not know, but certain it is that when it was opened both fish were alive.

REPORT OF THE NEW YORK FISH COMMISSION.

THE eleventh annual report of the Commissioners of Fisheries of the State of New York for the two years ending December 31, 1879, has just been laid before us, no report having been made last year. From it we learn that there has been a steady advance and improvement in all departments, and a gradual but apparent replenishment of the rivers and lakes. Complaint is made that the efforts of the Commission are to a certain extent counteracted by the reckless disregard with which protective laws are treated by a certain portion of the community that would enjoy or destroy in the present to the neglect of the future, and we are glad to see that the Commissioners are becoming interested in the subject of laws, as we believe that the whole question of fish laws in every State should be considered by its Fish Commission, and no law passed without their sanction and approval, while they should at the same time be empowered to enforce them. The policy of the New York Commission has been to educate the people up to the point of taking care of the fish which they supply them with, and a beautiful policy it would be if it were not for the fact that there are in every community persons who have no thought or care for the general welfare, and who would take the last trout or shad in the stream for their own table or for market, if it were possible to get it, and that they recognize this is shown when they say, "Volunteer effort will never be sufficiently repressive, and among the associations for the protection of game only one or two have been of much use."

At the last session of the Legislature, the number of Commissioners was increased from three to four, and it was understood that this was with a special view to the cultivation of Long Island streams and the propagation of salt water fishes, which are of great value, perhaps more than the entire fisheries of the rest of the State, and which have, like the sea fisheries of all countries, been neglected until the recent experiments of the U. S. Fish Commission in hatching cod attracted attention to it, when it at once struck everybody that there was no good reason why fish should not be increased in salt water as well as in fresh, the only thing to be considered being the enlarged field, which would, of course, require operations to be upon a scale in accordance with it, a matter rendered easy by the new methods now in use in fish culture, which have been adopted everywhere for extensive work.

Two species of trout from California have been obtained which they (the Commissioners) call "mountain trout" and "McCloud River trout," whatever they may be, as the scientific name is not given. And here we would say that the New York Commission is not happy in its choice of common names for many fishes, having a nomenclature of its own not recognized elsewhere—as "Oswego bass," "strawberry bass," "bull heads," etc. But, to return to the trout. It is said that these Californian fish are superior in rate of growth and hardness to the native, though not so beautiful. We confess to being a little puzzled at this, as we thought that one of the varieties was *Salmo irideus*, the beautiful "rainbow trout," but not having seen the fish in their ponds, this may be our mistake.

Of "salmon trout," *S. namaycush*, many specimens have been reared in confinement at Caledonia, and are found to be very sensitive to temperature, some of them being six or seven years old, and weighing twelve pounds, being perfectly domesticated, as shown by their breeding in confinement.

The shad season was favorable, and a good showing is made of fry hatched between May 14 and June 20, when a freshet put a stop to operations after 6,636,000 had been turned loose, the largest season's work for the past five years. The catch by the fishermen is also reported in a quotation from the Rochester Express as being exceptionally large, "so much so that the hounds along the river have been freely manured with shad, and tons of fish have been thrown over at Albany by the fishmongers, who would not ship at the reduced price demanded by outside market men."

Carp have received some attention, 500 young having been received from Prof. Baird in November, 1879, which were distributed to eighteen persons, none receiving over twenty-five specimens, and their growth and acclimatization is a subject for future reports. Letters reporting the success of

plantings in different parts of the State are published, and an appendix gives the list of eggs, fry and adult fish distributed, making a very good showing of work done.

LAUNCH OF THE RAFT.

WE had been fishing from an old raft, which, if it had ever been a thing of beauty, was not "a joy forever," for it had annoyed us up to the jumping off point, where patience ceases to be a virtue and commenced to indicate a very decided tendency to laziness or stupidity, and the only recourse remaining was the construction of a new raft, one built after the most approved model and known as the "Prime Raft." The manner of its construction is best described by the graceful author of "I Go a Fishing."

Having cut your two side logs, hew near each end of these a notch as deep as you please, only let this notch grow wider as it deepens. This is easily done by cutting out with an axe. Then cut your cross timbers and hew their ends down, if necessary, so as to slip the ends into the notches in the side timbers. Having slipped the end through the notch, split it and drive in a wedge to make it hold tight in the notch. You will thus have a stiff, stout frame and can pile on your cross-logs and balsam boughs with perfect assurance that the raft will not go to pieces.

When it was announced that the raft was completed and ready to be launched business was universally suspended and the anglers at the adjacent camps made a holiday of the occasion. The camp fires smoked with a denser smoke, dish cloths fluttered from every cook-house, and tin pans, pails and kettles shone like silver beer-mugs. Ample provision had been made for the comfort and convenience of the sight-seers, every one of whom had the option of standing in front by the music or of shimming up as many trees as they chose and gazing down upon the skilled workmen as they busied themselves about their different specialties connected with the enterprise.

After much anxious waiting everything was ready, and at the third or fourth "Ye ho! all together, boys," she glided like several serpents into the water, and as she straightened herself, business-like Jack did not break over her the traditional bottle of champagne, but burst a vial of tar oil and christened her the Goslow.

The echoes returned a hundred fold the cheers that rolled down the mountain sides, the tinware clattered with joy, and every dish cloth and towel fluttered with delight. The old back log at the camp took a tumble and sent up a cloud of sparks, while the birds piped their cheerful songs and filled the summer air with their long-drawn cadences.

The Goslow was launched and completed independent of Congressional appropriations, and the feverish expectancy of its projectors was quieted. The ship-builders of the Delaware and the Clyde were at last convinced that their yards could no longer monopolize the naval architecture of the world. On her trial trip she attained, under the unfavorable conditions of a head wind and a defective paddle in the hands of an inexperienced paddler, according to Whistler's new system of guessing, the very satisfactory record of one and a quarter kinks an hour. This record will be very materially improved upon when her floating gear has dovetailed closer, and when she has more perfectly shaped herself to the peculiar formation of the lake.

Her fittings were of the most gorgeous description compatible with utility. She was covered with huge sheets of spruce bark and carefully selected boughs. A chunk of red sandstone of the Devonian age, fastened to a three-quarter-inch manila rope, made an anchor convenient in size and weight. There were two luxurious seats, one at each end of the raft, which was intended to go like a ferryboat, either way.

The saloon and staterooms are intended to be left in the woods, forming, in connection with the kitchen, what is known as the camp. When the Goslow is in commission these rooms may be reached on emergencies by jumping overboard and swimming ashore. The bathroom, anywhere in the lake, furnishes ample conveniences for those who believe cleanliness akin to godliness. Altogether it was admirably adapted to the purpose for which it was intended, and its appearance was in perfect harmony with its surroundings.

A raft after the Prime model possesses some advantages

over the ordinary boat. In the matter of speed it is deficient, but for real solid comfort after the fishing grounds are reached the properly constructed raft bears off the palm, and more than repays the extra time and power required to move her. The angler can walk about without being obliged to say, "Now, Jack, be careful and lean over a little while I get by you. All right now."

There is lots of elbow-room and no "hard-a-lee"ing.

MILLARD.

THE DETONATION OF "DITTMAR SPORTING POWDER."

UNITED STATES CIRCUIT COURT.—New York, Feb. 19, 1880.—De-fense John A. Shields, United States Commissioner Southern District of New York. Deposition of Carl Dittmar, of Binghamton, N. Y., who, being first duly sworn, deposes and states in answer to Cross-Question 236:

"My gunpowder, when I first made it, had the same tendency as nitro-glycerine powder. It burst most all the guns at first, when I began to introduce it. It was just the same as if I would use NI-TRO-GLYCERINE POWDER. I have it now so that it is tamed down, and don't burst any more guns."

THE affirmations quoted above were made under oath. They were not originally intended for publication in the FOREST AND STREAM, but we have already printed them twice, though without the permission of the author, and we venture to tax the reader's patience with another repetition of them. In this sworn statement the manufacturer of the nitro-cellulose explosive compound, styled "Dittmar Sporting Powder," confirms our own views of that product. And the fact that we accepted the first three of these affirmations, and did not accept the last one, is a good and sufficient explanation of our discarding the hitherto prescribed and approved shotgun tests in our experiments with the explosive. Those who may have followed us through our study of the powder to this point, will readily agree that such experiments could never have ended in anything more decisive than the unsatisfactory, contradictory and valueless results of five years of shotgun tests. Those experiments have also been disastrous. Had this frank avowal of the true nature of the "Dittmar Sporting Powder" been made in 1875, the sportsmen of America would have been spared the loss of some thousands of dollars worth of guns, and one man at least would have been prevented from maiming himself for life.

There was never a product put upon the market more prolific of debate than that explosive compound which is grained like black powder and has the color of nitro-glycerine. The discussion was not provoked by the legitimate difference of opinion attaching to an agent which produced certain uniform and easily determined effects. The balling thing here was that no two disputants could agree as to what the action of the "Dittmar Sporting Powder" really was. The fact was, and is, that that compound being a nitro-cellulose product may explode by simple combustion or by detonation, and between these two extremes in a wide variety of modes and with a balling variety of effects.

To attempt to determine the explosive nature of the powder by experimenting with it in a shot-gun is the sheerest folly, although, owing to the strenuous and successful misrepresentations of the powder, that folly has only now become manifest. We have attained certain results in the course of our tests of this powder, which, when considered in the light of our theoretical study of the product, are more satisfactory and conclusive than fifty years of shot-gun trials. We showed last week how successfully the manufacturer had explained away the unfavorable results of shot-gun trials. We venture the remark that the FOREST AND STREAM'S tests cannot be so readily evaded.

ANVIL EXPERIMENTS.

Our first experiments were with an anvil. They were suggested by the following statements:

"If my powder is put on an anvil and struck with a hammer it does not explode."—Letter of Carl Dittmar in FOREST AND STREAM, March 16, 1876.

"It cannot be exploded by concussion."—Circular of Dittmar Powder Company (No. 2).

"It can never be exploded by any concussion or friction."—Circular of Dittmar Powder Manufacturing Company (No. 2).

Now, evidently, the simplest way to test the truth of these statements was by trying whether or not we could explode the powder on an anvil with a hammer. We tried it.

1. A pinch of the powder "FFF," sent to us by Dr. S. P. Nash, was placed on an anvil and struck with a light hammer. It exploded.

2. Same experiment repeated with "B" brand, "C" brand and "FFF" brand, which had been received by us in sealed cans from the Dittmar Powder Manufacturing Company (No. 2). Result in each case the same as in experiment 1. These tests are so simple that any one can repeat them. The face of a flat-iron may be substituted for the anvil.

3. A pinch of "C" brand was placed on the anvil and a gun was placed over it. Upon this was held a light hammer, which was then struck with a heavier hammer. This experiment was repeated several times, and each time the powder exploded. In repeated trials with black powder (Eagle No. 3) it was found that the black powder would ignite after the blows had been repeated long enough to make the hammer cut through the wad and come into contact with the face of the anvil.

4. Same experiment, with leather pad over powder. The

Dittmar easily exploded every time. The black could be ignited only after repeated and heavy blows.

We had now obtained sufficient proof to satisfy ourselves that the "Dittmar Sporting Powder" can be, under certain conditions, exploded by "concussion or friction." A more interesting test was then made with the powder in the pressure gauge.

5. In a paper shell, of which the cap had first been exploded, we placed $3\frac{1}{2}$ drs. of the "B" brand and placed a wad over it. Upon this wad rested a short iron bar, the other end of which was capped with a cylinder of lead. This was placed in the pressure gauge with the end of the steel pin of the gauge resting upon the lead cylinder. A charge of powder was then exploded in the gauge, the effect of which was to force the iron bar by a sharp concussion down upon the wad and charge of Dittmar powder. The latter exploded.

6. The same test was repeated with $3\frac{1}{2}$ drs. "C" brand, and with a like result.

7. Repetition of 6 with same result.

8. A thorough test of black powder (Eagle No. 3) was then made, but the powder did not explode, although a blow was struck sufficient to reduce the grains to dust. This dust, when ignited afterward, burned with a sudden flash.

MORTAR EXPERIMENTS.

The mortar used was a heavy cylindrical block of cast iron, strengthened by massive wrought iron bands shrunk upon it, and bolted at an angle of 45 deg. to a timber foundation sunk in the earth. The bore was 4 in. in diameter. Into the bottom of the chamber was sunk a steel disk, 3 in. thick, leaving the length of bore 5 in.

The shot, also cylindrical in shape, fitted the bore with great exactness, was 7 in. long, and weighed 27 lbs. At the centre of the lower end of the shot was a shallow cavity for the charge. In the centre of this cavity was a recess into which the exploder fitted in such a manner as to leave the fulminate of the cap in the powder chamber. From the centre of the shot to the outer end was a small hole for the passage of the electric wires, which are connected with a spark generator. In place of the wires a safety fuse may be substituted.

The method of firing the mortar is as follows: The disconnected wires are first introduced into the percussion cap, and passed through the shot, the cap being fitted in place. The powder is then placed in the powder chamber, and secured by pasting over it a thin sheet of paper, care being taken so that the surface of the shot when in the mortar may not be raised even by the thickness of the paper from the steel face of the bore. The shot being in place, the wires are connected and the charge fired by electricity.

This mortar is so accurate, as shown by repeated tests, that with the same charge of the same powder—provided the composition of that powder be uniform—it will throw the shot into the same hole again and again. It is evident that it should do this, for the conditions of the mortar itself are the same in each test. Different methods of firing may, however, be employed: fuse, medium percussion cap, and stronger percussion cap; and in this way the conditions of explosion may be varied. The degree of difference in the results then gained will depend altogether upon the character of the explosive employed.

Thus a nitro-glycerine powder, like dynamite, we have seen may, according to the conditions, burn by simple ignition, or it may detonate. Tested in the mortar, we found that a charge of two pennyweights of dynamite, fired with a fuse, simply burned and did not throw the shot out of the mortar. Exploded by means of a percussion cap, it threw the shot 230 feet. Again, the same charge, when a stronger cap was used, threw the ball 241 feet. It was clear that there was here a radical difference in the natures of the two actions, and that each of these natures was developed by the condition of the explosion.

Black gunpowder, we have also seen, when exploded under different conditions, manifests at all times essentially the same explosive nature. Tested in the mortar, we found that four pennyweights of black powder (Eagle No. 3), fired with a fuse, threw the shot 146 feet. Fired with a medium percussion cap it threw the shot 162 feet, and with the stronger cap 193 feet. Here there was manifestly only more or less complete actions of the same nature.

Having determined these facts, it is evident that the mortar test is a most excellent one to determine the true nature of various explosive compounds; and that, according as the manifestations of their explosive natures when tested with fuse and cap, approximate the action of nitro-glycerine, or of common black powder, the compounds themselves ought to be classed with the one or the other. If a powder acts in the mortar essentially like gunpowder, it belongs with gunpowder; if it acts like dynamite, it belongs with dynamite.

The powder used in the mortar experiments was the "C" brand. The tests were made to determine, first, the uniformity of the powder; second, the different manifestations of its detonating nature. The mortar was in each case charged with two pennyweights of the powder, and the greatest care exercised to secure perfect uniformity of conditions for each explosion.

1. Fired with a fuse. The shot was thrown in repeated trials: 12ft., 12ft. 6in.; 6ft.; 2ft.; 5ft.; 8ft. 6in.; 6ft. 9in.; 8ft. 6in. Minimum, 2ft.; maximum, 12ft.; average, 7ft. $\frac{1}{2}$ in.

2. Fired with a percussion cap, medium strength. The shot was thrown in repeated trials: 14ft.; 17ft.; 17ft. 6in.; 9ft.; 6in. Minimum, 6in.; maximum, 17ft.; average, 9ft. 7 1/2 in.

3. Fired with strong percussion cap. The shot was thrown in repeated trials: 126ft.; 87ft. 4in.; 149ft. 8in.; 140ft.; 150ft.; 145ft.;

169ft. Minimum, 87ft.; maximum, 169ft.; average 138ft. 11 5/16 in.

Considering first the uniformity of our results, or more strictly speaking, the lack of uniformity, we find notable variations in the results gained in each set of tests. Fired with a fuse the distances which measure the ballistic force range from 2 ft. to 12 ft. 6 in., (or as 1 to $\frac{6}{5}$), a range which is far exceeded when we come to the trials with a medium strength percussion cap. Here the variation is from 6 in. to 17 ft. (or as 1 to 34), a difference sufficient at all events to give some explanation why those who have shot this compound in a gun have made so perplexingly different reports of its action. These different results are best explained by the theory that in the second series of tests, the powder made only a partial manifestations of its detonating nature.

In the third series, by the use of a stronger grade of caps, this detonation was made each time more complete, and we find a less startling difference of distance. Here the variation was from 81 ft. 4 in., to 169 ft. Hence, it would appear that to secure the most uniform results with "Dittmar Sporting Powder," it must be exploded under conditions which will insure its detonation. Those are not the conditions under which the average man cares to discharge his gun from the shoulder.

Again, comparing the results of these three tests with the results obtained by the same tests with dynamite and black gunpowder, we have:

Dynamite.....	—	230	241
Dittmar.....	77 1/2	97 1/5	138 1/16 5-7
Black.....	146	162 1/2	193

From this it appears that the "Dittmar Sporting Powder," in respect to the difference of its explosion under different conditions, bears a closer analogy to dynamite than to black gunpowder. Were its character to be inferred from these tests, we should be compelled to place it among the explosives which may be detonated, did we not know already that it belonged just there and nowhere else.

The figures acquired by our mortar experiments are suggestive. If we were ignorant of the composition of the powder, and of its qualities as determined by chemistry, these figures would be unintelligible. Keeping clearly before us the conditions already explained, under which explosives of a two-fold nature may be exploded, by simple combustion or by detonation, we may satisfactorily account for each shot fired from the mortar. The charge at one time simply burned, at another it detonated, in others it partially burned and partially detonated.

The "Dittmar Sporting Powder," the manufacturer claims, is twice as strong by weight as black powder. If by that it is meant that the powder, exploded under similar conditions, has greater ballistic force, the claim is manifestly unfounded.

But just here it must be remembered that detonating explosives are not properly projectile agents. The mortar experiments, which measure only the projectile work accomplished, are no true tests of the relative strength of such widely diverse explosives as black gunpowder and "Dittmar Sporting Powder." One is in its action gradual and ballistic; the other may be instantaneous and shattering.

The charge of black powder employed was four pennyweights, that being equivalent, according to the statement already referred to, to two pennyweights of the Dittmar nitro-cellulose. But the latter, when given its greatest power, failed to throw the shot as far as the black powder threw it under like conditions. If the Dittmar powder is twice as strong as the black, where did all this strength expend itself? The answer is plain. This highest possible explosion of "Dittmar Sporting Powder" is by detonation. In detonation the force of the explosion is exerted instantaneously and in every direction alike; no time is allowed for it to concentrate itself in the line of the least resistance. In this mortar experiment only a part of the force was ballistic or projectile; the rest was exerted against the sides of the confining chamber. The mortar had been constructed to withstand just such a trial, and the shattering force, which would have destroyed an ordinary firearm, was expended in heating up the solid mortar. If, instead of firing that charge with an electric spark and from a heavy mortar, we had fired it from a gun held to the shoulder, and with our finger to the trigger, it is extremely questionable whether we would now be writing about the detonation of the "Dittmar Sporting Powder," or, for that matter, about anything.

HABITS OF SALMON.—A step in advance toward a correct knowledge of the life history of our salmon has been made by the Fish Commission of Maine, it having been decided to label all the breeding fish in the hatching works at Bucksport with tags of platinum and then to liberate them and to continue this operation for a succession of years in the hope of obtaining more light upon certain vexed questions such as the subject of biennial spawning, etc. The similar experiments which have been made in this direction have been unsatisfactory inasmuch as they were not continued in a systematic manner, and the returns were meagre and added but little to our knowledge. The Maine Commission may accomplish much by following out their programme in a systematic manner, which we have no doubt will be done.

STEAMBOATS AND FISH.—The fishermen on the Rappahannock River account for the scarcity of shad by the fact that a steamboat runs up the river three times a week. This may satisfy them, as they only look at this one river and have no other theory to offer, but if they will get out their telescopes and take a look at the amount of navigation, both steam and sail, on the Hudson, where one is seldom out of the sound of

the pounding of paddle wheels or the sloshing of scrow propellers, they will wonder why there can be any shad there; yet the fact is, that of all shad rivers on this continent the Hudson is the best—that is, it furnishes more shad than any other. Evidently the Rappahannock shad have a more delicate organization than those of the Hudson, or there is something the matter with the theory.

The Sportsman Tourist.

OCTOBER.

It is October, and the glory of the year

Is in the skies and on the woods extended far and near:
It glows in burnished clouds, it dushes all the air;
It lies in hollow groves, in uplands brown and bare.

The tutted groves have lost their bright midsummer green,
And now a softer russet lush creeps o'er the woodland scene:
Or distant purple hills there loathe a gauzy veil,
A silver vapor hovers o'er the river in the vale.

The orchard trees all glisten with globes of yellow gold
That bend the bough and strew the earth with opulence untold;
The ripened cornfields shake their pennons thin and white,
And to a feast the chestnuts the village school invite.

The gossamer spider-web is strung from tree to tree,
And up the air the dithie-down doaks like a ship at sea;
The asfets and the dahlias like flames in gardens glow,
And by the roadside wild flowers display a royal show.

Dim seen, the cautious angler glides on from brook to brook,
Now by the open meadow, now in some lushy nook,
And now across the mill-pond, with water-plants o'ergrown,
I see his floating bait, and where his lines are thrown.

And o'er the salty marsh the gun's report I hear,
And see the snipe and curlews stoop in their swift career;
While o'er the open bays I see the wild ducks wheel
The red-neck and the widgeon, the whistler and the teal.

Oh! glorious days of autumn! with all your pomp of skies,
Your harvests and your fruits, your flowers of matchless dyes;
How dear to manly sportsman your ripe, imperial time,
Your sports by "Stream and Forest," in Nature's royal prime.

Peconic Bay, L. I.

ISAAC McLELLAN.

AN OLD-TIME NEGRO HUNTSMAN.

IN the earlier part of this century, my father and uncle—the former a judge for more than forty years—acquired in their youth a large tract of land some 15,000 acres in extent, lying in the upland and mountainous country where the Alleghenies and the Blue Ridge draw together. They were both men of large families and of large possessions, both in lands and negroes. This mountain property lay some sixty or seventy miles from the paternal mansion, and the headquarters of our family; but for nearly fifty years it was their custom to visit annually this grand game preserve—for such it was—and enjoy, in company with a large number of invited friends, several weeks of shooting and hunting.

A great train we were, in patriarchal fashion we wound along the roads westward, with teams of males and saddle-horses, wagons loaded with the good things of this life, a numerous pack of hounds, and all the implements of the chase necessary for insuring success. With what pleasure these reunions of relations and friends were looked forward to from year to year may be readily imagined, as the same party of from thirty to forty, or their representatives, as deaths or accidents made gaps in our ranks year after year, gathered around the camp fires that marked our route.

The most prominent figure in all this imposing array in sylvan matters was old Jake, my father's negro huntsman. My father and uncle themselves autocrats, as on such occasions they were, and the strictest of disciplinarians, had tacitly to acknowledge the sway of Uncle Jake when he was once fairly on his horse with his pack around him. It is many long years since this faithful old servant was gathered to his fathers, but memory still recalls many incidents connected with him that are strikingly illustrative of the conical side of a race of domestics long passed away.

It is needless to say that he was inordinately proud of his hounds, which were, in truth, a well-chosen pack, numbering, perhaps, from twenty to thirty. The renown they reaped he claimed for himself—their failure or disgrace he shared to the full. There was no pack in the whole of Virginia, he held, that could touch them. The excellencies and the weaknesses of each dog, like all good huntsmen, he was accurately acquainted with.

Jake was, of course, a great favorite with old and young. He was allowed many privileges above the common. Thus, the blacksmith of the home plantation, he was required to give no exact account of the work he did for the neighbors, which, in truth, brought him a good round sum yearly. A good double cabin was assigned to him, and as much land around it as he and his family could work in off hours. As huntsman he was expected to train the young dogs as they came in to foxes, and on all good hunting days he was allowed the choice of the stable, which generally contained a number of young blooded colts; and it was a noted fact that Jake never failed to single out the best horse for his own use. He was a most excellent rough rider, though there was nothing in his appearance to mark his fitness for the post of honor my uncle had assigned him. In figure he was short, thick set, and heavy built, and he sat his horse like a lag of meal; but there was something in his broad, genial, mirth-inspiring face that drew the young to him as by magic; while the absolute control he had over his hounds, and the trumpet tones of his voice ringing through the forest, soon convinced you the huntsman that he was the right man in the right place; and when the quarry, be it deer or fox, was up, and the pack was racing on a burning scent, the way in which Jake cleaved his way at a gallop through the brush, or cleared the fallen logs and ravines that intercepted his career, was enough to convince you that it would require a more than ordinarily bold horseman to hold his own with him.

During one of the annual hunts at which my uncle had command, a party of us were one morning wending our way to a new drive. The day before the whole pack had run off.

All the dogs, save one, however, had returned by night, and this one was still absent. My uncle expressed great concern at, as he supposed, the loss of the dog, which was named King, and was a special favorite. Before we had got to our hunting grounds, however, the notes of a single hound running on, which was evidently Jake's, broke upon our ears.

"Jake," said my uncle, "that's King."

"Yes, Mars' Sam, that's King. I'm nos' sho."

And King it was, sure enough. He appeared to be likely to cross the road some quarter of a mile further on, and my brother received orders to gallop on and head off the deer. A few minutes later the report of a gun told us of his success, and riding up, we found him standing over a fine doe, with King by his side. The dog had been running the deer apparently for twenty-four hours. It seemed certainly rather an improbable supposition, but both Jake and my uncle stoutly maintained it to be the case.

Whether it was a truce of incredulity on my part that Jake saw in my face as we were riding along together shortly after this, I know not, that made him exclaim to me: "Why, sir, that's nuthin' for them ar dogs to do. Mars' Sam's stock o' dogs is the rule old British breed, and that race o' King's war'n' nuthin' to what I've known them breed of dogs to do. There was waist an old red fox up that in the mountain right above Mars' Sam's, and Mars' Sam was the race I had sent him, but I never could catch him, 'case I was always obliged to blow off the dogs, and give him up for want of time. Well, sir, I swear, come Christmas, that catch that fox I would if it took me all the holidays. I know'd 'zactly whar he lay, and by day on Christmas morning had him up. All Christmas day I run that fox, and 'bout night you never heern such a chase. Next mornin' Mars' Sam he sends one of the nigger boys to see what had come o' me and the dogs. Well, sir, I took that nigger's fresh horse, and I runs that fox all that day. It was night Mars' Sam sent me nigger to hunt for me and the dogs, but I takes his horse and runs that fox all that night. Next mornin' my last horse was done broke down, so I gets down and takes after the hounds on foot. But, Lord bless you, sir! it made no manner of difference, for the fox was walkin', and the dogs was walkin', all in full sight! Well, sir, me and the dogs walked after that thar fox till sundown, when we cotched him; and when Mars' Sam sent for us again, they had to git a wagon, and haul me and the dogs home."

"Why, Jake?" said I.

"Fac', sir! You jest ask Mars' Sam. Dem dogs, I telly you, is the rule old British breed, and they 'lows no varmint that runs the ground to git away from them once the scent gits hot."

Charleston, Virginia.

NON-RESIDENT GAME LAWS.

HAS A STATE THE RIGHT TO PROHIBIT A NON-RESIDENT FROM SHOOTING WITHIN ITS BORDERS?

PHILADELPHIA, SEPT. 23, 1890.

EDITOR FOREST AND STREAM:

There has lately been considerable discussion as to the right of the Western Game States to prohibit non-residents from shooting within its borders without a license. I have taken the trouble to look the matter up some little, and if you consider it of sufficient interest to the "men of guns," it is at your service.

The above heading was suggested to me by reading the case of McCredy vs. State of Virginia, which was decided on appeal from the Virginia Supreme Court. The case developed the following facts: McCredy, a citizen of Delaware, was indicted, convicted and fined for the violation of the following State law of Virginia: "If any person other than a citizen of this State shall take or catch oysters or any other shell fish in any manner, or plant oysters in the waters thereof, he shall forfeit \$500 and the vessel, tackle and appurtenances." The case was taken to the U. S. Supreme Court on appeal, and it was there argued that the State law was in violation of the 2d sec. 4th Article of the Constitution, which declares that, "The citizens of each State shall be entitled to all privileges and immunities of citizens in the several States."

The Chief Justice, in delivering the opinion in this case, which I have condensed as much as practicable, but would strongly advise all who are interested in this matter to borrow from some one of their law friends the book, and read the full opinion. It may be found in 4 Otto, p. 291.

The Chief Justice, after citing the above section of the Constitution, said:

"This section does not vest the citizens of one State with any interest in the common property of citizens of another State. The principle has long been settled in this Court, that each State owns the soil and waters within its jurisdiction, unless they have been granted away. In a like manner the States own the tide waters themselves, and the fish in them, as far as they are capable of ownership, while running. For this purpose the State represents its people, and the ownership is that of the people in their united sovereignty. The title thus held is subject only to the United States' paramount right of navigation. Subject to this right (navigation) a State can grant in its discretion to its citizens the beds of rivers, to be used as a common for taking and cultivating fish. Such an appropriation is, in effect, nothing more than a regulation of the use by the people of their common property. The right which the people of the State thus acquire comes not from their citizenship alone, but from citizenship and property combined. It is, in fact, a property right, and not a mere privilege or immunity of citizenship. Following, then, this rule, and looking only to the particular right which is here asserted, we think we may safely hold that the citizens of one State are not invested by this clause of the Constitution with any interest in the common property of citizens of another State."

The italics in the above are my own.

Following this decision to its legitimate conclusion, it cannot fail to impress one that if a State can make such a law as to oysters and fish, it certainly has the same power as to game. It will be observed that the Chief Justice words his opinion with a degree of caution when he says—"looking only to the particular right which is here asserted." He evidently intended to leave future controversies to be decided upon their own basis, but so far as precedent alone covers it is most assuredly a strong foundation for a game society to rest upon.

The opinion continues as follows on this point: "And as all concede that a State may grant to one of its citizens the exclusive use of a part of the common property, the conclusion would seem to follow, that it might by appropriate legislation confine the use of the whole to its own people alone."

Words could not be stronger than in the closing language of the above. Taking the law, then, as we find it, it follows as a matter of course that a State in its sovereign capacity

over the common property within its borders may grant to a body of men, or even to a single individual, a right to take such property to the exclusion of non-residents of such State, and in so doing it violates no provisions in the Constitution. I do not believe that any State Game Society could convict a resident of their State for shooting without a license, although I know of no decisions that cover this point. The inference is deducible, however, from the above case, that a State could not make such a distinction between its own citizens as to common property.

A collateral question to this, I noticed, was left in *statu quo* in your Correspondents' column, where it was asked if a man could purchase, turn loose and kill game upon his own land during the closed season. I should certainly say "No" to this proposition; for if the contrary be the case, it would make the closed season nullity. For example, take the case of a couple of gentlemen of my acquaintance who own a large tract of quail land in one of the Southern States. Now, if these gentlemen have the right to kill game out of season on their own lands, they certainly have the power to delegate that right to as many of their friends as they think proper. It may readily be seen that in many parts of the country such a construction of the closed season would be a mere farce.

F. H. J.

Natural History.

THE FRENCH DEEP SEA DREDGING.

WE referred very briefly a short time ago to the results of the deep-sea explorations carried on during the past summer in the Bay of Biscay, but at that time we were able to furnish only a few general facts in connection with the investigations made by the *Travailleur*. A recent paper by Dr. J. Gwyn Jeffreys, read before the British Association for the Advancement of Science, gives us, however, more complete information with regard to the expedition, and we therefore present to our readers some extracts which we think will be of interest to them. The dredging was undertaken by a commission appointed by the French Government, and consisted of Mr. Milne-Edwards, President; Marquis de Folin, Prof. Alphonse Milne-Edwards, Prof. Vaillant, Prof. Merion, of Marseilles, Dr. Paul Fischer and M. Perier, of Bordeaux. At the suggestion of M. de Folin, the Minister of Public Instruction invited Dr. Jeffreys and Rev. A. M. Norman to accompany the party and assist in the work. The vessel employed was a side-wheel steamer of 900 tons, of 150 horse-power, and was well fitted up with all the necessary apparatus for dredging. She had a crew of 128 men, besides the special assistants who accompanied the different members of the commission.

The expedition started from Bayonne on the 17th of July. From that time until August 1, with the exception of Sunday, the work of sounding, dredging and trawling was kept up without intermission. The weather during this whole time was fine. Dr. Jeffreys states that:

"The principal object of the expedition was to ascertain the nature of the fauna which inhabits at considerable depths this part of the Bay of Biscay; and this object was successfully and thoroughly accomplished. Twenty-three dredgings were made for that purpose at depths ranging from 377 to 2,600 metres, each metre being about thirty-nine inches, or rather more than half a fathom. The dredgings between 600 and 1,000 fathoms were the most important. Every department of the Invertebrata was well represented; and novelties were discovered in Mollusca, Crustacea, Echinodermis, Annelids, Actinozoa and Sponges."

In a physical and geological point of view, this French expedition has borne good fruit. No less than 103 soundings were made. They have proved the existence, within a few miles of the coast, of a submarine valley opening from the Fosse de Cap Breton, and extending to a point opposite Cap Penas. The striking linearity of depth within a narrow area, which thus appeared, were noticed in a Bayonne newspaper of August as "*des grands fonds sous-marins, qui tranchent sur les côtes de l'Atlantique les collines pyrénéennes*." As a general rule, it may be said that where mountains or high land approach the sea, the depth of water is greater off that coast than where the land lies low. But this must depend in a great measure on the geological nature of the land adjacent to the sea. If the formation be granitic or gneissic, the wear and tear or denudation must be slower than if the formation be sandstone, Cretaceous or Tertiary, and the action of waves and storms on the surface of the land must be proportionally increased or decreased, and must raise the sea bed to be more or less filled up in the course of time. Everywhere during the dredgings of the *Travailleur* in deep water the sea bed was found to be covered by a thick layer of mud, of a different color from that of the Atlantic ooze; and this mud has probably accumulated from untold ages by the incessant alluv of the Gironde, the Adour, and numerous other rivers and streams into the Bay of Biscay. As may be supposed, the fauna which inhabits this mud is very scanty, and it requires a considerable amount of patience and perseverance to extract a few organisms from the unpropitious material.

Very soon after the return of the expedition, a Preliminary Report of the zoological results of the dredging was prepared by Prof. Alphonse Milne-Edwards, which was afterwards published in the *Journal Officiel de la République Française*. The mollusca, a large part of which have been handed over to Prof. Jeffreys for preliminary examination, appear to include 152 species, of which 138 were species found by the *Porcupine* in 1870, three are peculiarly northern, one Mediterranean and eleven new to science.

A curious mollusc discovered by the expedition is the *Mytilus* *luteus*, a mussel of considerable size, inhabiting the deep water, and living in the mud not above referred to. Dr. Jeffreys states that "it moors or fixes itself by means of a large and densely matted byssus, which is spun by the foot. This byssus is capable of being spread over a considerable extent of surface, and it not only prevents the mollusc sinking into the soft mud and being smothered or buried alive, but enables it to feed comfortably on the innumerable animalcules, which swarm on the surface of the sea bed. It is of the same use to the mollusc as the snowshoe is to the Arctic traveler."

THE UNKNOWN BRAZILIAN EDENTATE.

[NOTE.—The account given below by our correspondent, Mr. Linden, is extremely interesting when taken in connection with the accounts given by Mr. F. Müller in *Nature* last year. It is true that the two stories do not seem to agree very well and it is possible that they may refer to two different animals. It should be remembered, however, that the statements of the German naturalist were based merely upon the statements of the country people and on rumors more or less vague and not always traceable to any reliable source, while the trustworthiness of this account is vouched for by our correspondent.]

It is hardly necessary to say that further and more detailed particulars concerning this supposed huge edentate are eagerly looked for by naturalists, and that the first specimen which falls into scientific hands will be a prize of the greatest value.]

It is about a year ago since the scientific world was startled by the report of a German naturalist traveling in southern Brazil, whence, in a lengthy communication to *Nature*, he substantiated the occurrence of a large and hitherto unknown quadruped inhabiting those forests. The animal itself had not been seen by him, but its tracks and signs, as manifested in huge furrows channeled out in the soil of the principal forest, supported the supposition that it was a creature of gigantic size. Notwithstanding the somewhat sensational character of the communication, it was, however, generally credited on account of the authenticity of its source.

By instituting inquiries in regard to this matter in the central valley of the Amazon, where I had spent in former years several months in collecting specimens of natural history, I have come lately in receipt of some further communications to me by one of my Brazilian friends residing there still, which tend to throw some light upon this mysterious creature. My informant, who has squatted down twelve years ago in the very heart of the Amazonian forest, has come to know, in the course of time, all its notable animals, birds and reptiles, and gives the following points of information:

There are, he says, among many curious animals, three distinct and well marked species of the anteater living there. The smallest has, like many of the quadrupeds of that interesting region, a prehensile tail, and is the most common species. The middle-sized one, which, in the most minute details, corresponds by designation with the great anteater, *Myrmecophaga jubata*, is called by the Indian hunters in their native dialect of the lingua geral, the *Tanandua bandeiro*, and is not often seen on account of its shy and retired habits. The third species again is utterly unknown to the white settlers of that region, though the Indians, who have an exact nomenclature for every large beast, bird, fish, lizard, or aquatic know it well by the name of *Tanandua assu*, which last adjective signifies large.

It will serve the present purpose best to give a rough extract of the personal experience of my informant respecting a hand-to-hand encounter he had himself several years ago with one of these huge and singular animals. Our dogs, he says, while we were one day out hunting for peccaries, came upon the track of some strange scented beast, as evidenced by their excited actions and loud barking. Following closely upon their heels, I got sight of a creature larger, though less bulky, than the tapir, called here in the Indian dialect the *anta*. But little exertion was needed to come up with it, as it moved rather slowly, and allowed myself and my brother to get close to it in a short time. We were armed with single barreled shot-gun, loaded with coarse shot, and an efficient breech-loading rifle. My brother fired first when about twenty yards from the animal, but although the ball upon later examination was found to have passed throughout the whole length of its body, it never slackened its speed, and only stopped running when at last cornered closely by the dogs.

It then raised itself, after the manner of the bear, upon its hind legs, using its great fore-paws, armed with formidable long claws, as a means of making an obstinate resistance. We had been frightened first by its singular aspect and great size, but now perceived that we had to deal only with a comparatively innocuous creature. To end this singular contest I advanced within a few yards in front of it and discharged the full contents of my shot gun into its well exposed chest, killing it almost instantly. Upon closer examination of our prize we found it in respect to structure to correspond with the common great anteater, and only differing from it by its color and greater size. Its snout was much elongated and the front teeth were lacking. The claws of its fore-feet were at least from four to five inches in length and about one in half inches in width at the base. The body exceeded in point of height that of the tapir, though it was less bulky and would have probably weighed less. Its fur was rather short, not bristly, and of a dusky hue, while the tail was long and bushy. Not knowing the scientific value of its skin or the skeleton, we left the creature to rot where we shot it, as the scene of the encounter was more than eight miles from home. On describing the animal to the natives about our plantation we ascertained that it had been seen by old hunters on rare occasions though always far away from the vicinity of any settlements. It is easy to see that such an animal, armed with such great and stout claws, used in the digging up of the nests of the lupin and momara ants, would be very likely to make great havoc in any soft soil in which the subterranean galleries of these insects are located. Diggings and furrows on such a big scale might naturally mislead persons unacquainted with the animal itself in respect to its true size, which had been theoretically exaggerated when its occurrence was first reported.

Byglio Society of Natural Sciences.

TAME QUAIL.—*St. Joseph, Mich., Aug. 30.*—A few days ago I went into the country a few miles and stopped with a friend over night. As we stood at the gate talking in the edge of the evening, he said to me, "I want you in the morning to step over into that field and see some tame quail (*Ortys virginianus*). I did not see them the next morning, but went out again in a few days, and getting there just at night, went to look for them. They are domesticated with a flock of tame turkeys of about twenty—two hens and about eighteen young. The young are about half grown. I found the turkeys at roost up in some apple trees and the quail on the ground near the trees. The latter ran off as I approached with my dog. Soon, however, returned. On making inquiries, I learned that the

turkeys hatched their young out in a field near the house. They came up at night and morning and were fed at the house, and rambled off during the day. One night, when the young turkeys were two or three weeks old, three little young quail came up among them. They have been with the turkeys ever since, and are now full grown. For the first two or three days they were somewhat shy, but since then they come around and feed and are as gentle as the turkeys.

When first seen the young quail were not larger than chipping sparrows. They brooded with the young turkeys under the hens till the young turkeys went into the trees to roost. The owner told me he had not watched where the quail roosted, but one time saw them on the fence, and saw one fly up into the tree. In following the turkeys, if lost in the grass or weeds, they call, and the hen turkeys answer them, and go to them just as they do for their own young. The next morning I went out and saw them all together in the roost. At my close approach with my dog they ran in the thickest group of young turkeys near the old ones. How they come with the turkeys is not known. My theory is that the old hen quail got killed, and the young ones came across the brood of young turkeys in the field; they being two or three weeks old, resembled the hen quail in size, and they followed and remained with them. Do any of the readers of the *Forest and Stream* know of an instance like this?

The owner of the turkeys told me that some years ago when the country was new and little settled, a neighbor of his had a hen come up with five young quail with her brood of chickens, and that they grew up with them. They stayed all winter, and three of them layed next spring and remained till fall, and then two of the coveys stayed away more or less, but one covey remained entirely domesticated. I shall keep posted to see if they get through the winter without being caught.

LUTHER.

THE EUROPEAN RUFF IN MASS.—Mr. Gordon Plummer, of Brookline, Mass., has just secured a fine specimen of the European ruff (*Phalaropus pugnax*), taken in Chatham, Mass., Sept. 11, 1890. It is a young male, and is recorded as the ninth specimen from North America, third for New England and second for Massachusetts. The other two New England specimens were taken, one female at Newburyport, Mass., 1871, and the other female at Upton, Me., 1874, and are in the collection of Mr. William Brewster, Cambridge.

THE SUN AND FULL MOON SIMULTANEOUSLY VISIBLE.—A Frenchman in the collection of a *Birds' Life*, notes with special interest the fact that on one occasion, while sailing upon the Mediterranean, I think (the book is not by him), he saw the sun and full moon at the same moment above the horizon. This occurrence I have frequently witnessed since having attention called to it, and notably on yesterday and this afternoon. The repetition of the phenomenon on two successive days is due to this being the harvest moon. Your readers will doubtless recognize this as a peculiarity of the moon when full during this month, and in October, to rise for several nights successively with very short intervals between the periods, from which circumstance she is called the harvest and the hunters' moon for those two months respectively. If your readers will observe carefully next month when the moon is at her full, provided the weather is clear, they may see in some localities the occurrence that Sir Henry deamed of sufficient rarity and importance to note in his very agreeable and readable book. Yours respectfully, Cambridge, Md., Sept. 18, 1890. E. G. W.

THE OPOBOTHORITES.—A few advance copies of Prof. Marshall's memoir on the Opothorites, or toothed fish, from the Cretaceous of Western Kansas, have been distributed by the author. The volume is of the very highest scientific importance, and the mechanical part is done in superb style, making it really a *livre de luxe*. We shall take occasion to speak at length of its contents at a future day.

Fish Culture.

HOW THE FIRST SHAD WERE HATCHED.—Editor *Forest and Stream*: I am quite sure that Mr. Milton P. Pierce, whose letter was published in the *FOREST AND STREAM* of Aug. 26, is under a strong impression in regard to some of the things he wrote about.

I was with Mr. Green at Holyoke a part of the time when he began his experiment there of hatching shad, and know from personal observation what his methods were. Mr. Pierce says that he began to hatch shad in the river, and not succeeding, changed his base of operations to a tributary having colder water, where he succeeded.

Now, this is the exact converse of the actual facts. Mr. Green began trying to hatch shad eggs as trout eggs had been hatched, viz., in a brook with trout hatching apparatus, that being the only way of hatching fish then known in those primitive times, and the result was that all the shad eggs died, and Mr. Green narrowly escaped a stroke. He became discouraged and was about ready to pack up his things and return home, when the idea occurred to him (how suggested I do not claim to know) of hatching the eggs in the river. The very first experiment in the river water succeeded, and was followed by continuance of successes, which had their crowning triumph in the invention of the shad hatching boxes.

Without having any desire to enter into any controversy on the subject, I feel as if I ought to say what I have in justice to the originator of shad hatching, who, through his tribulations at Holyoke, succeeded at last in conferring a vast benefit upon the shad-eating people of the world.

LIVINGTON STONE.

U. S. Fishery, McCloud River, Cal., Sept. 23, 1890.

QUINAT SALMON LAND-LOCKED.—The following note from Mr. N. K. Fairbank, Commissioner of Fisheries for Illinois, tells us the story of the ripening of California salmon eggs in Geneva Lake, Wis., where the fish have been planned. Under date of Sept. 23 he says:

I have sent to-day to Prof. Baird, a very fine specimen of a California salmon, weight 84 pounds, a female, full of well-developed, ripe eggs. She was taken by Mr. Welscher, who has charge of my hatching and ponds here, on Monday last, in the small creek which empties into the lake. The day before he saw seven or eight together, which were judged would weigh twelve pounds each, but had no means of capturing them at that time.

It begins to look like breeding salmon in fresh water, but

I shall not assert it for a fact until I know, but I will assert my belief in it now.

I do not believe that salt enters into, or is any essential element in the problem. I believe that with clear, deep water, and plenty of food and room, the salmon will propagate in fresh water.

N. K. FAIRBANK.

Geneva Lake, Wis.

NEW HAMPSHIRE.—A friend informs us that the Fish Commissioners of New Hampshire have been busy for the past year stocking the waters with land-locked salmon and trout and are now beginning to hear of the growth and success of the former in many waters. The pike-perch planted in 1876 in Sunapee and Massadisco lakes have reappeared in their progeny, many of which have been captured in those waters after having been given up as lost. Mr. Samuel Welber, one of the commissioners, took nineteen fine salmon at the hatching house at Plymouth previous to July 9, since which time low water has prevented their ascent, but there are hopes that the fall rains will enable another run to go up, as many more have been seen below during the summer in various places along the Merrimack and Penikese rivers in the deep holes at the mouths of cold spring brooks. The drought in the State has been very severe and many of the smaller trout brooks have been almost dry, and it is fortunate that the commission has breeders enough left to raise 100,000 or more from which to restock the streams.

Our informant says that black bass fishing in Sunapee Lake has been excellent all summer and many large fish have been taken.

NEBRASKA.—The Nebraska Commission is working hard with the exceedingly limited means at their disposal, and have 130 German cup which they are keeping for breeders to raise fry for distribution. They are preparing to hatch 500,000 eggs of the quinnat salmon this fall, having planted 190,000 of them last spring from the hatching of the previous year.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN OCTOBER.

FRESH WATER.	
Grayling, <i>Thymallus tricolor</i> .	Black Bass, <i>Micropterus</i> . (Two species).
Muskellunge, <i>Esox lucius</i> .	Rock Bass, <i>Ambloplites</i> . (Two species).
Pike-perch, <i>Esox reichertii</i> .	Worm-mouth, <i>Channichthys eulacea</i> .
Pike or Pickerel, <i>Esox lucius</i> .	Crayfish, <i>Decapoda</i> .
Pike-perch (yellowed pike) <i>Stizostedion americanum</i> .	Bachelor, <i>Pomoxis ananias</i> .
Silverside, etc.	Club, <i>Scenolabis cornutus</i> .
Yellow Perch, <i>Perca flavescens</i> .	
Striped Bass, <i>Morone chrysops</i> .	
White Bass, <i>Ambloplites</i> .	
SALT WATER.	
Sea Bass, <i>Centropristis striata</i> .	Sea Trout, <i>Salmo gairdneri</i> .
Succinea, <i>Achoerogaster probatilis</i> .	Weakfish, <i>Cynoscion regalis</i> .
Porgie, <i>Stenopus argenteus</i> .	Shore Wallow, <i>Menticirrhus littoralis</i> .
Striped Bass, <i>Morone americana</i> .	Croaker, <i>Micropogonias undulatus</i> .
Spot, or Lafayette, <i>Leiostomus xanthurus</i> .	Blotch, <i>Pomatomus saltatrix</i> .
Spot, Redfish, or Channel Bass, <i>Sparus ocellatus</i> .	Spauld, <i>Leiostomus xanthurus</i> .
Bluefish, <i>Pomatomus saltatrix</i> .	Corn, <i>Gobion regalis</i> .
Pollock, <i>Pollichius carbonarius</i> .	Blue, <i>Stella pinnata</i> .
	Kingfish, <i>Menticirrhus nebulosa</i> .

SPRING SPAWNING SALMON—THE GRILSE.

THE SALMON'S EGG.

THE spring spawning salmon ought to be an object of interest to fish culturists. Hitherto no attempt has been made to propagate from this variety, possibly because the existence of spring spawners in America has not been recognized, although long known to Indians and backwoodsmen. The nests I saw in July, 1864, on the Miramichi were seven in number, on a small shoal. The eggs, deposited in March or April, would hatch about the first week in August, or later, according to the depth of the snowfall, and the temperature of the water in May or early in June. We do not know that the eggs are deposited in March under the ice—it is probable that this is the case.

A curious question arises as to the present maintenance of the supply of salmon in our rivers. To which class are we to attribute the keeping up of the supply with advancing civilization, and all the changes it brings into the physical characters of the streams? Is it due to the fall spawners, which every one has patronized, or to the spring spawners, which few even recognize? In some cases, I think, there can be no doubt we are indebted to the spring spawners, particularly in Newfoundland, where the practice of barring the rivers in the summer months has so long prevailed; and yet the rivers show a fair supply of fish, but very far from the original wealth.

It is not remarkable that fish culturists have failed to recognize and use the spring spawning salmon for propagation, because the time for capturing the fish is the worst possible. The woods are exceedingly uncomfortable in March and April from melting snows, the rivers often choked with ice, and full. The whole surroundings of camp life, except the beautiful skies, the breath of spring and the coming birds, are unpleasant. But, considering the poor results from vast outlay, it is worth while asking the question whether our fish culturists have not got hold of the wrong fish? Whether the season for depositing the eggs, its hatching and the maintenance and protection of the young fry, are not now more congenial for multiplication with the spring spawners than with those whose season is the fall? This is a very important question, and it shows how much we have to learn respecting the habits of the salmon, for we do not yet positively know whether a fall spawning salmon may not, under certain conditions of temperature and food, become a spring spawner, and vice versa.

THE GRILSE.

The great majority of grilse do not ascend rivers for the sole purpose of spawning. Male grilse are known to mature early, but female grilse, as a general rule, are not spawning fish. Like the herring in its third year, only a very small proportion of grilse are ready to breed. They ascend the rivers as grilse, and return as grilse or immature salmon. This being the case, we ought to catch a great

ratio of grilse than of salmon, because the chances of escape are against the grilse. The salmon going up stream are of two classes: 1st, the breeders, which remain until late in the fall, after all nets are raised, and return as kelts. 2d, the migrants, which stay a short time and return to the sea during the fall when new ice is possible. Let us suppose that 100,000 number of grilse enter a river, 100, 19 per cent of which are breeders; and of salmon, 100, fifty of which are breeders, and fifty migrants. Ninety grilse and fifty migrant salmon have to run the gauntlet of the nets and of poachers (twice—going up and coming down—for both grilse and salmon are caught on the stream side, as well as on the lee side, of nets in a river, but only on the lee side in tidal waters or against the current. The fifty breeding salmon and the ten grilse are safe if they pass the nets, for they return to the sea and the nets are taken up. It follows from this assumption, that the 100 grilse will diminish more rapidly than the 100 salmon, because the chances of escape are against them. Now, what does practice say? The following table shows the catch of salmon and grilse in the sea, at the mouth of the River Dee in Scotland, for thirty-two years, viz., from 1828 to 1859. The averages are for each group of seven years, with the exception of the first group:—

Years.	Number of Salmon caught.	Number of Grilse caught.
1828 to 1831 (4 years).....	15,329	15,329
1832 to 1835 (4 years).....	2,905	10,857
1836 to 1839 (4 years).....	3,425	16,135
1840 to 1843 (4 years).....	2,946	10,857
1844 to 1847 (4 years).....	4,353	7,384

(The data are from Alec. Jopp's "Inquiry into the causes of the decline in the produce of the salmon fisheries in the Dee and the Don." He attributes the cause to the use of the stake net and bag nets on the coast.)

In the sea the chances were the same for salmon and grilse, but the grilse catch declined to one-half in thirty-two years, the salmon catch increasing. Therefore it is to the river we must look for the chief cause of the decline, where the chances against the grilse are greater than against the salmon.

The following table shows the proceeds of the river fishings for one mile from the mouth of the Dee, after the fish have escaped the sea-fishings in the estuary and along the shore:—

Years.	Salmon.	Grilse.
1828 to 1831 (4 years).....	5,499	15,329
1832 to 1835 (4 years).....	5,298	10,857
1836 to 1839 (4 years).....	1,275	3,514
1840 to 1843 (4 years).....	259	1,677
1844 to 1847 (4 years).....	1,993	1,399

The grilse catch fell enormously short in the river, where their chances of escape were less than those of the salmon, because the greater proportion returned, or endeavored to return, to the sea before the nets were raised. Experience, no doubt, had something to do with the less take of salmon, which had learned to wade the nets.

FOREST AND STREAM of Oct. 21, 1879, contains a notice from the sea of the wretched salmon fishing in the Tay. If we divide the years mentioned into groups of five, so as to get an average, the conclusion we arrive at is the decline is setting in, because the grilse are diminishing in a greater ratio than the salmon. The figures are as follows:

From 1837 to 1841, 106,368 salmon, 189,483 grilse—salmon catch to grilse catch as 1 to 1.78. From 1842 to 1846, 148,160 salmon, 229,639 grilse—salmon catch to grilse catch as 1 to 1.54.

There appears from these tables that the ratio of grilse to salmon is diminishing in the Tay; and unless protective measures had been introduced, the decline would have been more rapid, and this resulted from a habit of the fish at different stages of its life.

In the river Don, in Scotland, the same results followed in the Cruive fishings, as may be seen from the following table, which extends from 1793 to 1852, a period of seventy-one years (A. Jopp's tables).

Sea trout are added to the grilse catch, but they only serve to mask the real decline of the grilse; they do not affect the general conclusions. The periods are septennial:

Years.	Weight of Salmon in Pounds.	Weight of Grilse and Trout in Pounds.
1793 to 1799.....	22,445	4,910
1800 to 1806.....	20,125	20,125
1807 to 1813.....	21,941	21,941
1814 to 1820.....	25,319	6,599
1821 to 1827.....	26,499	20,861
1828 to 1834.....	18,324	18,324
1835 to 1841.....	6,141	9,335
1842 to 1848.....	6,622	6,782
1849 to 1855.....	4,752	4,752
1856 to 1859.....	4,263	1,070

We see from this table that in the period from 1832 to 1838 the average catch of grilse was equal to that of salmon; in fourteen years it fell to one-fourth of it, and unless protective measures had been adopted the salmon fisheries of the Don would have been ruined. The interpretation I put upon these results, having regard to the different habits of the fish at different periods of its life, is this: It is in the river and not in the tidal waters of the sea that one leading cause of the decline must be searched for, and it is probable that it arises from the habits of the fish at certain periods of its life, which gives the grilse less chance for survival than the adult salmon under existing modes of capture. Hence it would appear that if we protect the grilse the salmon will protect itself. These conclusions gather force from the fact that the grilse are far more numerous than the salmon and yet diminish much more rapidly. Give them the same chance by enlarging the mesh of the net so that they can freely pass, and the salmon fisheries will increase. But it is one thing to make a law and another thing to enforce it.

The *Fish* notices the intensely cold winter of 1879 in England in connection with the very bad salmon year. It is a comfort to know that if we compare intensely cold winters in Europe with the salmon catch three years later, we are forced to the conclusion that intensely cold winters there are very favorable to salmon preservation; and three years after an extremely cold winter one may expect (other things being equal) a very good salmon year.

This is a curious and interesting subject of inquiry, and I shall ask for space to advert to it in another communication, closing the present one with some remarks on the egg of the salmon.

THE EGG OF THE SALMON.

The foundation of the egg is a wonderful phenomenon. The egg in relation to the milt presents one of the most astonishing spectacles, if rightly viewed, which microscopist and "philosopher" can witness. To those of your readers who have not given any attention to this subject it may be thus briefly described. (For a full description *vide* Dr. W. H. Henson on the ovum of osseous fishes; translation of the Royal Society, London, 1859.)

The egg of the salmon is the size of a pea consists of a semi-transparent spherical mass, whose whole external covering is penetrated by a very minute funnel-shaped opening,

termed the micropyle. The milt of the male contains a vast assemblage of exceedingly minute organisms, styled spermatozooids. Perhaps a hundred thousand of these spermatozooids may be equal in bulk to one egg. Taking a minute quantity of milt on the point of a fine needle, and putting it into a drop of water in contact with an egg, the careful observer may witness the following consequences with a good microscope: The number of spermatozooids wandering vigorously round the passive egg, traveling over its surface with considerable activity. Suddenly one reaches the minute funnel-shaped micropyle; it enters, and the mouth of the micropyle contracts. Suddenly, pulsation begins in the egg, a new life has dawned and the micropyle speedily closes. Other spermatozooids continue wandering over its surface, but in fifteen or twenty minutes grow weary, languish, drop off, and die. But vivid pulsations continue in the egg, and the new creature is forming. Let us carry the thoughts which may crowd upon us to a further issue. We have had under view two imperfect lives, that of the active spermatozoid and that of the passive egg. But the moment the spermatozoid enters the micropyle a new and a perfect physical life begins, which, as we shall presently see, already possesses absolute knowledge of a special kind, requiring only a short time for its manifestation.

Two of these eggs thus "fertilized" are conveyed far away, say to Australia, and these placed in a river in which salmon had never been. The eggs are hatched, the young fish in due time migrate to a sea of which their ancestors had no experience, and return to a river of which they knew nothing, and where there are no teachings to be gained from the experience of others of their kind. How did they obtain this absolute knowledge of an unknown sea? and whence did they gather the instinct that it was essential they should return to the river in which they were born, at stated periods? Ages of experience in others of their kind were not there to assist them, and migration is said to be the result of experience. It is clear that out of two imperfect lives a new life possesses absolute knowledge—knowledge not gained by experience or teaching—has been produced. Is this to be explained by the formula of words that the instinct which impels the resulting creature to migrate to a sea and return to a river of which its ancestors knew nothing is "an inherited habit?" Or is not the gift between the imperfect lives of the egg and the spermatozoid on the one hand and the resulting perfect life of the impregnated egg on the other, with its absolute knowledge, infinite to us, passing the power of language to describe, and failing which, we apply to it a formula of words?

It seems to me that the conception which is so often designated as an "inherited habit," is a manifestation of design, infinite in its variety, endless in its future attainments, and crudely spoken of in the too often misleading language of philosophy by the barren term "evolution," which, properly used and interpreted, indicates only a part of design. The possession of absolute knowledge by the embryonic salmon, and all similar cases, is fatal to the materialistic view of evolution. How the results of experience can be conveyed from the parent to the spermatozoid or to the egg—for habit is derived from the female as well as from the male—we may never fully understand, but that it is an effort infinitely beyond the mere "potency of matter" we may adoringly believe.

HENRY YOUNG HIND.

EEL TRAPS WHICH TAKE BASS—LEGAL DECISION.

OSWEGO, N. Y., Sept. 3, 1880.

FOR years the sportsmen of this vicinity have sought legislation to aid them in protecting the fish and game of this portion of the State from improper and reckless destruction, and many good laws to-day exist upon our statute books as monuments of their earnest labor. But one nuisance still remains, and I desire to call the attention of the lovers of fish throughout the State to the present ineffective law, in the hope that a remedy may be thus brought about. The Legislature of 1879-80 passed amendments to the game law as enacted in 1878-9, one being contained in Chapter 531 of the laws of 1880. A portion of Section 2 of this Act reads as follows:

"No person shall kill or catch, or attempt to kill or catch, any fish except minnows in the waters of Lake Ontario, the Seneca or Cross lakes, or in any of their outlets or tributaries, except in any way or manner, or by any device whatever, except with the use of hook and line." This portion of the section was specially prepared, and was supposed to be all that was necessary in order to render illegal the eel weirs in the Seneca, Onondaga and Oswego rivers, by means of which it is claimed that not eels only, but thousands of black bass are yearly caught. With this idea, the Leatherstocking Club, of Oswego County, directed their attorney to notify the owners of the eel weirs in Oswego River of the existing law, and to demand the removal of the weirs, which he did. The eel fishers refusing to obey the instructions of the club, an action was brought to compel the same, and that action having been in one form referred to the Hon. Wm. H. Ruger, of Syracuse, a decision was rendered therein by him, from which I quote below:

"SUPREME COURT—The Leatherstocking Club, of Oswego County, against Lewis Fuller, Jr., and George Montague.

"The above entitled case having been duly referred to me to hear and determine, and I, having heard their proof and allegations, do respectfully report as follows:

"I find the following points:

"The plaintiffs are a corporation under the laws of this State, and do business at the City of Oswego, and are duly authorized to bring the above action.

"That during the months of May, June and July of the present year the defendants were engaged in the business of catching eels in the Oswego River by a device known as eel weirs, and caught daily, by such device, from two to five hundred eels.

"That the method of constructing such weirs, and of taking said eels, does not involve the use of a hook and line in catching said eels.

"That the defendants had been in the exclusive possession of said eel weirs and the place of taking said eels in the manner and at the place aforesaid for the period of thirty-five years at the time of the commencement of this action.

"And I do find on questions of law:

"1st. That it was not the intention of the Legislature wholly to prohibit the taking of eels by means of eel weirs in all of the fresh waters of the State, for the second paragraph of the section of the statute under which this action is brought either expressly or implicitly authorizes the taking of such fish by such means in all of the fresh waters of the State except

those where such taking is expressly prohibited in the first paragraph of the section, so that it cannot be argued that the prohibition claimed is within the spirit of the enactment, if it be not found in this very letter. See Sec. 23 of Chap. 534 of the Laws of 1879, as amended by Sec. 1 of Chap. 531 of Laws of 1880.

"If the prohibition is found at all it must be embraced within the specified descriptions of places enumerated in the first paragraph of such section.

"It is conceded that the *locus in quo* is not specifically described in such first paragraph, and is not included therein unless it is embraced by the general term 'outlets,' as applied to the said waters of the several lakes, 'Onondaga, Oneida, Seneca, or less,' and the question to be determined is whether the Seneca and Oswego rivers are intended to be described under such general term or phrase.

"The Seneca and Oswego rivers are both large and important streams of water flowing over a large section of territory, having designated and specific names coeval with the earliest history of the country, and repeatedly described in the legislation of the State by such names.

"I cannot believe that it has intended to describe the waters of such rivers by the use of the vague and uncertain phraseology used in the Act in question. To hold otherwise would be to deprive the term outlet of all special meaning, and to confer it upon all of the various channels, both immediate and immediate, by which the waters of a specified body pass in course from their source to their final destination, the ocean.

"The same laws which would make the Oswego River the outlet of Oneida Lake would make each of the other rivers and lakes, viz.: the Oneida, Seneca, Oswego, Ontario and St. Lawrence waters included under the phrase, 'outlet of Oneida Lake.'

"I therefore hold that the acts of the defendants in taking eels from the Oswego River in the manner described is not a violation of the provisions of the statutes.

"2d. The defendants are entitled to a judgment, dismissing the plaintiff's complaint with costs, and the same is hereby ordered.

Wm. C. RUGER.

"Aug. 14, 1880."

FISH PARASITES.—*Philadelphia, Sept. 7*—A friend and myself went out this A. M. with our dip-nets to catch some minnows for my aquarium, and the first catch we made we noticed that they were unusually large around the body, the largest of them two inches long. We took one of these and opened it, and found it to contain a worm about two inches long of a reddish hue and pointed at both ends. It was not in the intestines of the fish, but between them and the body of the fish. We opened another and it had two in it, but not so long as the others. We made another catch and opened one of them, and found they were all the same. When taken out the worm is coiled up in a knot and looks just like a piece of red sewing-thread twisted up with your fingers. The place where we caught them is a creek which comes from a woods about a mile from where we were and runs into the Schuylkill river through a marsh and a distance of about one hundred and fifty yards from the river. The tide rises and falls with the tide in the river. Is there anything, do you suppose, to cause these worms in the fish in the creek, as the minnows we caught on the other side of the river had none in them? Are they not a parasite, and if in larger fish would it not be injurious to eat such fish? Please answer, and oblige.

THOMAS J. CHADWICK.

A similar parasite was shown at a meeting of the American Fish-cultural Association some two years ago by Mr. H. D. McGovern, who claimed that it went through one of his trout from side to side, thereby killing it.

We do not think such a worm would live through the cooking which fish usually get; or, if it did, it would live in the stomach of a warm blooded animal. As you find them so plenty, why not send some of the fish to the National Museum at Washington, and you will then learn all about them in the course of a few weeks or months, according as other work may press. Then, when you find what they are, send us the account for the benefit of those who are interested in such matters.

RANGLEY LAKES.—Of these famous lakes of Maine, where the brook trout grow up to ten pounds or more, a correspondent writes: "One of the most attractive points about this region is the exceedingly moderate sum of money which one can dispose of during a vacation. It costs but \$12.50 to get from Boston here and back, by way of the Eastern, Maine Central and Sandy River Railways, and the journey is pleasant enough to amply repay one for the outlay in time and money. A stage line or private conveyance brings passengers from the terminus of the railroad, at Phillips, Maine, to Estey's, at the head of the upper, or Rangley Lake, over a road twenty miles in length and peculiarly rich in scenery. From Estey's a little steamer called the Molly-chunk-amun's built and run by C. W. Howard, sails down to the outlet, where the Mountain View House catches all the passengers. Board at the lakes ranges from \$1.50 to \$2 a day in June and September, and from \$1 to \$1.50 in July and August. The greatest rush has always been in June and September, when the fishing is liveliest. But this year the hotels have been full all the time.

"The basis of the Rangley Lakes contain the drainage of about nine hundred square miles of territory, and it is estimated that their waters measure twenty-four million cubic feet. They blend with the ocean through the channel of the Androscoggin River, and are utilized in various ways. At Lewiston, in this State, they furnish power for manufactories, and in the spring of each year they float millions of logs from off these rugged hills to an eager market on the coast. The seven lakes forming this chain are all navigable, but their names would demoralize any spelling match in America. They are as follows: Quonosso, Monsechenzanie, Capsuptic, Kennebagog, Molchunkamun, Welokeenabacook and Umbagog. Noah Webster would have given one howl of despair and yielded up the ghost had he ever been invited to tackle these fellows. And it is only when I am in particularly robust health that I dare to write them. The woods which thickly fringe these hills and fill the air with scent of spruce and cedar are populated with deer, moose, caribou, black bear and other game, and the birds are to the sportsman's hearts. Within three or four days of caribou has been killed within gunshot of this point, and it is no unfrequent thing at any time of year to find venison upon the tables hereabout under the vague title of 'wild mutton.' Hard is to be pleased who cannot find recreation amid such surroundings, and tame must be the heart of him to whom the billows and sand and champagne cocktails of the seashore

are greater joys than the buoyant rest of the mountains, the soft lapping of fresh water wavelets and the balsamic scent of great, deep forests, such as these."

GROWTH OF CARP.—A living carp is now on exhibition in the aquarium at Blackford's, in Fulton Market, which weighs one pound and eleven ounces. It is one of a lot sent from the National Carp Ponds at Washington one year ago, which then weighed about two ounces, and were placed in the ponds of Mr. H. D. McGovern, in Brooklyn, where they have since remained.

Mr. McGovern has occasionally fed them with catfish douch, but the most of the food was obtained in the pond, and consisted of the roots of sweet flag and water cresses. There can be no possible doubt concerning this growth, which it would have required from three to five years for a trout to have obtained, as previous to this there were no carp in my waters on Long Island. Other specimens in the ponds are said to be even larger, and the citizens of Suffolk County have a chance to see some of them at their fair at Riverhead, Oct. 5 to 7, as Mr. McGovern has promised to make an exhibit of them, as well as trout and black bass, in tanks during the fair.

A Tennessee correspondent tells us that where the protective laws have been enforced in his State the game fish have multiplied to a great extent and are quite plenty. The Fish Commission planted 500 German carp of last year's hatch in ponds near Nashville, and they are now on an average two and a quarter pounds in weight; showing their perfect adaptability to the water and climate of Tennessee, as indeed they have to every other place where they have been tried. The commission of this State deserve great credit for their work from the fact that their Legislature has never given a dime toward defraying the expenses of their valuable labor in restocking the waters, an oversight which we hope the next one will correct. We are pleased to learn that Col. Geo. F. Akers has been reappointed Fish Commissioner for Middle Tennessee by the Governor on the 23d inst.

FROGS KILL CARP.—That large frogs devour many small fishes is well known, but that they are destructive to larger ones we think has been overlooked in America, where we have frogs greatly exceeding any European ones in size. In the account given below, it does not appear that the frogs actually ate the flesh of the fish, but merely attached itself to it as a sort of parasite until blindness and the loss of the protecting slime resulted in death. We reproduce this transatlantic observation on this strange habit in order that our carp breeders may be on the watch for a similar action upon the part of our own batrachians. The story comes from a Silesian newspaper, which requests German naturalists to observe a similar propensity of the frog allowed to be seen during the draining of some huge carp-ponds upon Count Schaafgotsche's estate of Warmbrunn. Upon transferring the fish from these preserves to baskets, for the purpose of conveying them to tanks wherein they might dispose themselves while their old familiar quarters were being cleaned, it was observed that frogs were clinging to the backs of many of the larger carp. Most of the fish thus burdened were blind, the frogs found feed being round firmly fixed to the eyesockets of their victims. In disregard of this strange phenomenon, the chief pond-keeper told our contemporary's informant that, according to his experience, extending over several years, frogs were the deadliest enemies with which carp had to contend, and caused an annual mortality among the fish under his care of from three to four per cent. of their total number. The frogs' object in besetting the carp, he said, was to feed upon the slimy matter that so frequently collects a sort of scale upon the sides of the fish, and he said, and once settled in their favorite seat, they speedily succeeded in causing their finny steeds, which, when blinded, being unable to look out for their food, soon perished of hunger. How tightly these voracious batrachians hold on to their living pastures was exemplified by the pond-master, who picked up a carp weighing two pounds and a half, and held it suspended in the air by one of the hind legs of a frog perched upon its back in the manner above described. The frog refused to death before to turn yellow on the third day after the parasitic crawler had taken his seat, rapidly waste away, and generally die within a fortnight from the commencement of their martyrdom. In clear water it is pretended that they can spy their nimble foe as he prepares to spring upon them, and by a timely wriggle often escape his attack; but in dim and slimy old ponds, like those of Count Schaafgotsche, they too frequently fall a victim to his saltatory skill and merciless appetite.

AN ENVOYED FISH HOOK.—*Fort Lewis, Puyon Springs, Col., Sept. 20.*—While cleaning some Rocky Mountain trout, which we had caught in the Piedra, I felt a sharp object enter one of them, and on looking found it to be a large steel hook, such as the Mexicans and Indians use. It was completely encased in a bag or cyst of skin that had formed around it. Think of an animal living with such a thing in his stomach! Yet he jumped for the fly that caught him, and gave as much play as a fish without so much hard steel inside. Verily fish do not feel pain. The hook and skin are preserved in alcohol. Will you please tell me if there is a paper solely devoted to fishing called the *Sea World and Fishing Gazette*, also the price? FERRIS.

We have not seen a copy of the paper referred to in three months, and hear that it has suspended publication, but whether for lack of support or because the editor's scrap-book was all exhausted, or both, we do not know.

DETROIT NOTES.—*Detroit, Mich., Sept. 26.*—Last Saturday night Hon. John S. Newberry, our sporting member of Congress, his partner and companion in all things, James McMullen, Henry B. Ledyard, General Manager of the Michigan Central Railroad, and Hugh McMillan returned from St. Clair Falls, where they spent little more than a day, and raised (honor be to them) on one hook and a couple of buckets of sheep's blood and heaves it overboard. The blood mix with the water, and by its odor, or otherwise, attracts the man-eaters, and he is not long without a bite. Once satisfied that

the hook has struck, he explodes the powder in the bottle by the battery, and behold, the shark appears floating on the surface of the water harmless and useless.

—Drawsiness, biliousness, pains and aches and ague, Hop Bitters always cures.

Game Bag and Gun

GAME IN SEASON, IN OCTOBER.

Moose, <i>Alces americanus</i> .	Woodcock, <i>Phalaropus minor</i> .
Caribou, <i>Rangifer caribou</i> .	Blackbellied plover, <i>Oxyechus</i> .
Elk or wapiti, <i>Cervus canadensis</i> .	Blackbellied heliope, <i>Heliope</i> .
Red or Virginia deer, <i>Cervus virginianus</i> .	Long-billed curlew, <i>Numenius longirostris</i> .
Squirrels—red, black and gray.	Turnstone, or calico hawk, <i>Streptopelia</i> .
Hares—brown and gray.	Red-breasted snipe, <i>Centurus</i> .
Reed or tree toad, <i>Dendrobates</i> .	Red-bellied sandpiper, or ox-bird, <i>Tringa americana</i> .
Wild Turkey, <i>Meleagris gallopavo</i> .	Great marbled godwit, or martin, <i>Chordeiles</i> .
Plumbeous grouse or prairie chicken, <i>Caprimulgus</i> .	Willet, <i>Totanus scutulatus</i> .
Quail or partridge, <i>Oryzopsis</i> .	Tattler, <i>Totanus melanoleucus</i> .
Song bird, <i>Perisoreus canadensis</i> .	Yellow-shanks, <i>Totanus flavipes</i> .

This enumeration is general, and is in conflict with many of the State laws.

"Ray birds" generally, including various species of plover, sandpiper, snipe, curlew, ox-bird, rail, phalarope, avocet, etc., coming under the group *Limosa*, or shore birds. Many States permit prairie fowl (plumbeous) shooting after Aug. 15.

ECHOES OF THE "DITTMAR SPORTING POWDER."

INDIANAPOLIS, Oct. 2, 1880.

Editor Forest and Stream:

You have placed the sporting fraternity under profound obligations in your exposure of the "Dittmar Powder." You have demonstrated my previous convictions concerning its nature.

H. G. C.

EAST BIRMINGHAM, Mass., Oct. 2.

Editor Forest and Stream:

I was thinking of using Dittmar Powder, but must thank you for telling the truth about it, as Hoshea Biglow says: "By Heaven, I like a man who ain't afraid." M. H. R.

Extract from a Private Letter.

I have been astonished to see parties shooting it. Our club tried it well and concluded that it was not safe. I consider that you have done the sportsmen of this and no doubt other localities a great favor by denouncing it.

FERNANDINA, Fla., Sept. 27.

Editor Forest and Stream:

Permit me to add my quota of thankfulness for the most able and satisfactory exposure of the dangers of Dittmar powder, which appears in your last issue. You may rest satisfied that you will be most gratefully upheld by all good sportsmen for you have opened our eyes to a danger to which many have been innocently exposed.

GRAHAM.

From the New York Star, Oct. 3.

The absorbing topic of conversation in sporting circles at the present time is gunpowder. It appears that several accidents have lately occurred, owing to the use of a nitro-cellulose powder, which explodes by detonation like nitro-glycerine. Mr. Dittmar, the patentee of the powder, is said to have admitted that it was a "gun-buster" at one time, but he avers that it is now O. K. Hence the difficulty.

From the Niagara Falls Gazette, Sept. 29.

The "Dittmar Sporting Powder" is the subject of a leading editorial article in FOREST AND STREAM of September 23. The pretensions of Mr. Carl Dittmar are thoroughly exposed, and the dangerous nature of the compound he manufactures fully explained. The sportsman who uses the Dittmar powder does so at his peril. At least it would be to his advantage to read the fourteen column article on this subject in FOREST AND STREAM. The editor is entitled to the thanks of all sportsmen for his thorough exposure—it is a settler. The sportsman who discards the old and reliable gunpowder for the Dittmar is a foolish man, liable at any time to pay the penalty in bursted gun and mangled hand.

Editor Forest and Stream:

I have just finished reading the Dittmar powder article, and if the powder is not "squealed out," why all I have to say is, it is hard to squeal. I have used the stuff to a small extent, but never liked it. I had a few shells that have been loaded more than a year with the Dittmar mixture, but when I read the communication that Sutton & Morehouse sent to H. C. Squires in reference to shells that had been loaded some length of time, I immediately looked over my box and laid out all the "D" shells, and having occasion to go down the river this morning I took them along, and when I reached a point in the channel between the Shore Buoy and Red Bank, where the chart gives us forty-three feet of water, I consigned the entire lot to a grave whence they will never be resurrected. So much for Dittmar powder.

C. C.

NEWARK, N. J., Oct. 4.

Editor Forest and Stream:

I cannot resist the impulse to write you my hearty thanks for your articles exposing the dangerous nature of the Dittmar powder. As one who is devoted to fishing, and one who occasionally fires a gun, I would say that I depend to a great extent upon the current literature relating to the latter for any knowledge pertaining to firearms. As such I should undoubtedly use and continue to use the Dittmar powder had not your truly public spirited article informed me of my danger. I detect flattery from the bottom of my heart, but must say I admire the enterprise and pluck of editor and proprietors, which cannot be otherwise than praised and indorsed by every true sportsman.

W. L. SINKLE.

Editor Forest and Stream:

Allow me to compliment you on your able and effective article of last week concerning Dittmar powder. I have distrusted and considered it a dangerous compound since I saw a rifle barrel weighing nine pounds burst into small fragments by a charge not exceeding in bulk 70 grains of powder. Mr. Sale, the owner of the gun, narrowly escaped injury, one piece passing through his hat. He wrote to the

company threatening to sue for damages, but beyond a promise that the matter should be investigated, never got any satisfaction. I believe I wrote you at the time, stating the facts of the case, but have forgotten the date. I consider your exposure of the powder and its manufacturer not only justifiable, but a great benefit to all sportsmen and others who have occasion to use explosives, as I believe that any one using it continually will sooner or later meet with an accident. I also think that these sentiments concerning the course of FOREST AND STREAM in the matter are the sentiments of sportsmen generally throughout the United States. An uncertainty as to which of the numerous Dittmar powder companies manufactured the powder which caused the accident of which I speak.

S. H. H.

FLORIDA SHOOTING.

FERNANDINA, Fla., Sept. 27, 1880.

Editor Forest and Stream:

Thinking that I might interest you and your readers with a few items of sporting news from this location, I have concluded to address a few lines to you, hoping at least to convey to most happy assurances of esteem and good wishes.

Our gun club has not made much progress, I am sorry to state. We organized, elected officers and adopted constitution and by-laws, and purchased a car's rotary trap, with a good supply of glass balls, but as yet no shoot has been had. However, among our number we boast of some very good shots, whose reputation extends over the State. Around Fernandina the sport is not as good as in other portions of the State. This may be explained by the fact that Fernandina is located upon an island, and there are so many potholes and negroes with old muskets that the birds are kept pretty well killed off. Then, too, at the meeting of our last Legislature the game laws of this State were entirely abrogated, much to the disgust of all true sportsmen. The consequence is that all game has been sacrificed. The greatest evil we apprehend is from the negroes, who trap the quail in most numerous numbers. We hope to secure legislation upon this very important matter at the meeting of the next Legislature, which convenes in November next. The main object of our organizing a gun club here was to endeavor to have proper game laws enacted, and we intend to accomplish it at all hazards.

We have very good snipe shooting from December to February near our city. Large numbers of the English snipe come upon our inland marshes, and afford most excellent sport. By taking the water, we can reach the best snipe grounds as would be possible to visit within ten or twenty miles of Fernandina. I went out last winter and secured some very fine bags. Each day not less than thirty, and often over fifty were killed over my Gordon settler Dandy, whose pedigree is well known in your State. I am a native of Florida, and have hunted in many of the counties of the State, but for quail shooting, my native county, Jefferson, and her sister, Leon, surpass all others for this sport. By taking the water, we can reach the best snipe grounds as would be possible to visit within ten or twenty miles of Fernandina. I went out last winter and secured some very fine bags. 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southern part of the State? I am against summer shooting if we can have it in the fall, but would rather have summer shooting than none at all. In regard to older game birds, I think we will find plenty of quail and grouse. There are many numerals, and those who have seen will average about eighteen or twenty in a cove. The past winter and spring, too, were here very favorable to these birds, and they hatched quite early. We have had fine sport during the past two weeks shooting plover. There were a great many large flocks on the grain fields, and we had fine sport for a few days. They are gone now, and we use our spare minutes in looking for the wary gray squirrel. He is about this season and just now in fine condition. Rabbits without end, and I will venture to assert there will be hundreds shot on the 1st of November within one mile of this town. We are only six miles from New York with a train reaching here at 8:12 A. M. on N. J. Central R. R. Those who are fond of the music of hounds could have fine sport here. P. H.

DUCK SHOOTING NEAR SYRACUSE.—*Syracuse, N. Y., Sept. 29.*—About us we have a very fair variety of shooting grounds, especially good grounds for woodcock and Wilson snipe, which are really about these days bright to bag. Now, I am not a sportsman, but as large as any man claiming to be a sportsman ever ought to make. What I was about to speak of are two ponds near this city, to the sporting fraternity nearly unnoticed. Otisco Lake is fifteen miles distant from this city and in this county—Onondaga. It is a beautiful little lake, seven miles long about a mile or so in width. I wish to say to the boys who enjoy good shooting late in the fall for ducks, snipe, etc., that there is no place I know of better adapted for sport than this. As large a string of ducks can be made from this lake as from most any other lake I know of. This lake is easy of access, accommodations at the foot of the lake are good and cheap. The greatest expense will be a team from this city. Hotel fare, \$18 per day.

The other point I wish to take Ontonagon is Big Sandy Creek Pond, on the bank of Lake Ontario, eight miles west from Pierpont Manor, on the line of the Rome and Watertown R. R. Fare from this place to Pierpont Manor, \$1.55; stage from there to the pond, \$1. A nice hotel has been built on the shore of the pond, and a large stock of good, a-bundant, and cheap food is to be had. The pond is a fine fellow, a live sportsman and excellent shot. He has a number of good boats, and all the appointments to make a stay pleasant and profitable. At this point there must be nearly a thousand acres of wild rice, of beautiful growth, affording most ample feed for ducks, and most magnificent cover for the sportsman. Late in October ducks congregate here to a very great extent, and the shooting is many times extraordinarily fine.

know of no better snipe ground than this anywhere in the State of New York. Woodcock can usually be taken hereabouts in the month of October, which would satisfy the most fastidious sportsman. Indeed, I consider this region of country as good as any in the State for late shooting. Partridge, quail, and snipe are also abundant here. For the season. Visitors will find Mr. George Wood, the gentleman who keeps the hotel, most heartily rejoiced to have any and all of his guests have a good time and a good shoot. His charge will be \$1 per day for board; no charge for boats. Should you wish to have a guide, you can hire one of himself, or furnish him with a gun and he will accompany you. He is fully competent at \$3 per day.

OHIO QUAIL, SUBOTICZ.—(Cleveland, Ohio, Sept. 30).—I would say here the chances for quail in Northern Ohio are better than for several years past. Boves I have moved seem to have large broods in numbers and are early and well grown. Can't shoot them till Nov. 15. Not much time left. Too dry for snipe here this fall. Woodcock tolerably plenty, but not much to be had. Ruffed grouse are scarce this season. Ruffed grouse are middling plenty for this section, not ever plenty. Am going next week for a hunt to John Davidson's, Monroe, Mich. Their season commences then for all kind of game. Writes me game prospect is somewhat better than last season. I was up last season and had a nice time with John, as every one who visits him: a. J. C. G. C. not plenty.

TEXAS.—*Chicago, Sept. 25.*—We have had a good number of plover here this season and fair bags have been made. The prospects of snipe, duck and goose shooting are flattering, as the recent heavy rains have filled all ponds and lakes, which are dry during the summer, with water, which, together with the mud, affords fine feeding places for them. Have shot on the 24th and 25, five and seven ducks, several flocks have been passing over town. Snipe and geese do not arrive here before the middle of October, but stay here all the winter if the season is favorable and water and food abound. Quail are not as numerous as they were in former years, but still good bags may be secured in some localities. A. H.

LONG ISLAND FORESTERS.—The Long Island Forester Club held their annual meeting for the election of officers at Wm. Cleaver's Light House Shades, corner of Putnam avenue and Irving place, Brooklyn, N. Y., on Wednesday evening, Sept. 22. The following officers were elected for the ensuing year: Henry Thorpe, President; Chas. M. Edwards, Vice-President; John A. Mahin, Treasurer; Chas. W. Field, Secretary. Mr. John Andrews was elected a member. Although the club is small, it does not lack interest in the objects for which sporting clubs should be organized (that is for the protection of fish and game), as is evidenced by their belonging to the State Sportsmen's Association and the Long Island Sportsmen's Association. They have just entered on a tour of the Adirondacks. They confine their shooting excursions to the East End of Long Island, where good sport is always to be had.

SOUTH CAROLINA.—*Charleston, Sept. 27*.—The coming shooting season, I think, will fully demonstrate the beneficial effect of the game law. Up to within three years ago any urchin who felt so disposed might have shouldered his gun in the breeding season, and have gone forth bent on destruction; the death of every bird which he happened to shoot caused the death of two or three young ones. The consequence was that to get any birds at all it was necessary to go at least ten or twelve miles from the city. But now it is altogether different. Birds are comparatively plentiful, and the coming season promises some rare sport.

OXFORD.

SAVED HIS DOG.—*Opeletoosa, La., Sept. 25.*—Snipe were seen here last Saturday, 18th inst. Teal ducks were in market this week. A party of five killed sixty-three prairie chickens last week, hunting parties of two days. The prairie was very dry, and the birds scattered, generally only one in a place. Quail are numerous; but we cannot shoot them with any satisfaction here till the crops are gathered and stock turned into the fields to break down the cover. Our best months are December and January. I had a pointer bit

through the tongue last week by a very large water moccasin; I poured about a tumbler of whisky into him immediately, which made him "dead drunk," and in less than a week he was ready for service. J. W. J.

OUR DETROIT LETTER. *Detroit, Sept. 26.*—I have just learned a fact of great practical interest to hunters, and after FOREST and STREAM shall have made it known I expect to see a rush of Nimrods to Northern Mich. that will require a special train possibly once a day. The Detroit, Grand Haven & Milwaukee Railroad, in connection with the Grand Rapids and Indiana Railway, offers reduced rates as a special concession to hunting parties bound for the north woods of Michigan. The fare from Detroit to Petoskey and return in parties of five or more is \$14.00 each, and in parties of two or three \$15.00 each. There is a proportionate reduction to all intermediate stations. Return tickets on these trains are good till Dec. 31. Dogs and guns are taken in the baggage car without extra charge, and special care is bestowed on them. Northern Michigan, now that the sultry days have sunk defeated away, is the paradise of hunters, and these new railroad arrangements, it seems to me, are just the thing to populate that paradise during the smash-hay season.

Mr. J. W. Thompson, of Louisville, Ky., writes from Point Mouillie (Ed. Gillman *et al's* famous shooting ranch) in these words: "I have killed about eighty duck, and they were about all I shot at—only made one shot that did not do execution."

MILIONS OF DUCKS.—*Tolado, Ohio, Sept. 21.* There are lots of ducks in the marsh now. I went to our Middlechord Club on the steamer Chief Justice Waite and down the bay from Cedar Point to West Sister Isle. It was just one mass of ducks, millions of them, mostly teal, some mallard and ring-necked. The club at Cedar Point had a grand opening of the season by having a duck hunt on West Sister Isle. The club by Col. Ollie Payne, of Cleveland, a gentleman of much wealth. It was a grand affair. Ladies and gentlemen, music and dancing, and after all a shoot by the club; and such a lot of ducks! The smallest number any one man secured

I was fishing Monday, Tuesday and Wednesday at our club. The water was too warm yet; few fish. Caught several and they were very fine; weighed 4 $\frac{1}{2}$ and 5 $\frac{1}{2}$ lbs. We are all waiting now for cold weather, so our ducks will keep. No use shooting them unless they will keep to get home.

A. C. N.

SPIRIT LAKE.—*Chicago, Oct. 1.*—Mr. A. P. Wilkins, land agent for the Chicago, Milwaukee & St. Paul Railway, has been in town for the past week, making arrangements whereby sportsmen can make the trip to Spirit Lake, Iowa, at small cost. The railroad company will furnish a hunters' car, with complete outfit for living, and thousand mile tickets, for the car and baggage, for the round trip, and porter and baggage. The car will accommodate from fifteen to twenty persons comfortably. They propose making a feature of these cars, and will spare no pains to make every one as comfortable as if they were domiciled in a hotel. For those not desirous of accompanying so large a party they sell round trip tickets good for two weeks, for \$20, and at the lake there are hunters' cottages, and a fine hotel, where the sportsman can find all the fixtures furnished at the nominal sum of \$1 per day. Game is reported very plenty there just now, including prairie chickens, ducks, geese, brant, etc.; and on the lake the fisherman may take his choice from black and rock bass, perch, pickerel, pike and an occasional sturgeon. This has been truly a most successful season for the sportsman. In a few more minutes information will have it cheerfully furnished them by addressing A. P. Wilkins, Whitewater, Wis., who has resided in this vicinity for the past eight years. J. C. H.

AMERICAN HAWK GUN CLUB.—*Brooklyn, Sept. 29*.—Last week a meeting was held in the extreme eastern district of Brooklyn with the intention of forming a sportsmen's club. He composed of young men residing in the vicinity. They named the association the Audubon Gun and Rod Club. The officers elected were: Robert T. Sabiu, President; Edward Blackwell, Vice-President; Frank Gerling, Treasurer, and James H. Heming, Secretary. The club already has a membership of fifteen, and bids fair in less than two months to become the largest and most influential sportsmen's association in the city. The club is organized for the purpose of protecting the game in their immediate neighborhood, especially between the Kings County line and Jamaica, and also to encourage skillful use in the rod and gun.

II. HUNTER.

MAINE.—*Hiddeford, Sept. 13.*—A party of seven good fellows started to-day for Eustis and Tim Pond for two weeks camp life. I guess Kin Smith will think he is taken when he sees these euns, ammunitation and fly rods. Dr. Hill and Will Elden, the crack rifle shots, strike out for big game of bear and moose kinds, while A. Pierce, J. R. Tibby, Dr. Hussey, E. Fishour, our efficient postmaster, and the local sportsmen, take to the woods with smaller game and skill in casting fly. Success attend them all, for many are waiting for bear steak and trout.

C. J. C.

MARYLAND.—The quail shooting in Queen Anne and Talbot counties, Maryland, proves to be unusually fine this season. There are few sections of the country where birds are more abundant, and in many places in each county the fields are large, and the sedge grass cover admits of the birds being shot early in the season in the open. One can hardly go wrong in making a selection of any of the little towns to put up at as headquarters. Besides quail, there are woodcock when the season is wet, and along the bay shore many variety of ducks.

EAGLE LAKE, *Mc., Sept. 23.*—Steele and I are now on our way down Eagle Lake. Weather cool; strong head wind. Have found plenty of fish and game of all kinds. There are twenty-three persons, to our knowledge, now encamped on this lake, and eight more on their way here. Since I last wrote a team has been put on Mud Pond carry, so that there is no lugging between Mooshead and this lake. We encamped on Churchill Lake to-night and expect to reach Munsungun lake by the middle of next week.

L. B. G.

FLORIDA COMPANION WANTED.—*Brighton, Sept. 27.*—I anticipate spending the winter in Florida (on the St. Johns river a few miles from Enterprise) in fishing and hunting. Am desirous of having a companion. If you know of any one intending to do the same you will confer a favor by putting me in connection with him. I start about the fifteenth of November. L. B. C.

A HOMING PIGEON SHOT.—*Centreport, L. I. Oct. 1.*—A colored man shot the other day, while after wild pigeons in this vicinity, a homing pigeon marked under the wing.
J. L. WILSON, New York City. No. 160.

NEW YORK.—*Hornellsville, Sept. 27.*—Plenty of ruffed grouse and black and gray squirrels are being killed here now. On the 23d a huge flock of crows passed over this place. They were over three-fourths of an hour passing. There must have been 20,000 in the flock. They did not fly like pigeons, but were from fifty to two hundred feet apart.

JOHN. How does our correspondent know that there were 20,000 in the flock?

(GEORGIA.—*Americus*, Oct. 1.—Our game birds (Bob White) are abundant. I never saw more of them. Our climate is delightful in fall and winter, and *Americus* furnishes board good and cheap, and if any of your Northern sportsmen who come South will make this a stopping point, we promise them as fine shooting as the country can afford, and as heartily a welcome as Southern hospitality can give. I've been out to-day for the first time; two guns bagged fifty. Sign.

FOREST AND STREAM GENERAL PASSENGER DEPARTMENT.
—Chicago, Ill., Sept. 26.—The following persons have recently passed through Chicago en route to sporting regions on the line of the Chicago & Northwestern Ry.: Chas. Bullock, Tursett Ellis, W. S. Armand, Jas. H. Hall and E. S. Tohey, all of Massachusetts. They go to the Maple River Valley.

MIDWAY SHOOTING CLUB.—The Midway Shooting Association, of Matawan, N. J., was organized in 1875, and chartered in 1880. The club now owns a fine plot of ground, some fourteen acres, at the junction of the C. R. R. and F. & N. Y. R. When the contemplated improvements of this property are completed, the grounds will make one of the finest shooting parks in the East.

Chicago, Sept. 30.- I have just returned with R. P. Flowers and party from N. Y. We had a splendid time and plenty of game. We were up at Grand Forks and Alsop, Dakota, and Adrian, Minnesota. Killed 755 chickens and ducks.

S. H. TURBELL.

WILD PIGEONS. — *Tolland Co., Conn., Sept. 29.*—Pigeons are scattered over this county in great numbers feeding upon the white oak acorns. Bags of 20 to 40 or more for a day's shooting of two guns are common. The pigeons have not been so plenty here for many years. F.

—Hop Bitters gives good digestion, active liver, good circulation and buoyant spirits.

SHOOTING MATCHES.

New York.—Regular semi-monthly shoot of the Miner Rod and Gun Club, Sept. 30, for the club medal presented by Capt. Aegy and also for a handsome badge donated by Judge Tinkel, both prizes going to the first man: Hurlingham rules:

Hoffman.....	1	0	1	1	1	1	1	0	-	Engels.....	1	0	1	0	0	1	1	1	0	-
Snelhs.....	1	0	0	0	1	0	1	1	0	-										
Davis.....	1	1	1	0	1	1	1	1	1	-										
Avery.....	1	1	1	0	1	1	1	1	1	-										

Both medals were captured by Captain Aery.

After the club shoot followed:

Holman.....	1 1 0 1 0 0 1-3	Elshel.....	1 1 1 1 0 0 0 0-1
Stiehrs.....	1 1 1 0 1 1 0-6	Aery.....	1 1 1 0 0 0 1-4
Davis.....	1 1 0 1 1 0 0-3	Junak.....	1 1 1 1 0 0 1-1

Stiehrs and Junak divided the money.

Hoffman.....	1	0	0	0	1	0	0	1	1	—	Engelert.....	1	1	1	1	1	0	0	1	0	—
Stiehrs.....	1	0	1	1	0	1	1	0	0	—	App.....	0	1	0	1	0	0	1	1	0	—
Davis.....	0	1	1	1	0	0	0	0	0	—	Junok.....	1	1	0	1	1	1	1	0	0	—

Engelert and Junok divided money.

Omo, Cincinnati, Sept. 22.—The Cincinnati Gun Club met at Macke's on the above date to contest for their club medal and other prizes.

	Birds	Plunge traps
H. Schaff
W. Caldwell
R. McGraw
J. C. Whetstone
W. H. Rice
M. Dorman
J. C. Whetstone
W. H. Rice
Jos. Bates
F. Smith
K. Smith, Jr.

Schiff won the gold medal on a straight score; Caldwell took second, 12½ pounds of powder; and McGraw third, 300 shells.

On tie for third prize, 300 shells, miss and out: McGraw, 4
Duffman, 3; Koch, 1.

KENTUCKY, *Ladonia Springs, Sept. 19.*—Score of a glass ball match shot between the Cincinnati Gun Club (formerly the Cincinnati Shooting and Fishing Club) and the Kenton County Shooting Club, of Kenton County, Ky. Mole trap: rise, 18 yards:

<i>Cincinnati Gun Club.</i>							
B. McGraw.....	9	.	0	1	1	1	1-14
H. J. Koch.....	"	.	0	1	1	1	1-12
W. J. Schult.....	1	.0	1	1	1	1	1-6-11
T. L. Smith.....	1	.0	1	0	1	1	1-10-11
J. C. Whitestone.....	1	1	1	0	0	1	1-11-11
W. Caldwell.....	0	1	1	1	1	1	1-6-1

Kenton County Shooting Club.															
Hale.....	0	0	1	1	1	1	0	1	1	1	1	0	1	10	
Hudson.....	0	1	0	1	1	0	1	1	0	0	1	1	9		
Wilson.....	0	1	0	1	0	1	1	1	1	0	1	9			
Remington.....	1	1	0	0	0	1	0	1	0	1	0	9			
Smith.....	1	0	0	0	0	0	0	1	1	1	1	6			
Baker.....	0	0	0	1	1	0	0	1	0	1	0	3			

ALBION CLUB.—*Grounds at Wickhams, Sept. 27.*—Semi-monthly shoot for club badge; 20 balls: Auld, 12; Hill, 12; Griswold, 14; Murphy, 6; Loughrey, 15; Bremner, 15; Sauer, 15; Barnes, 14; Robertson, 8; Gordon, 11; Hanna, 16; Moylen, 12.

CAPITAL CITY GUN CLUB.—Washington, D. C., Sept. 30.—Thu

club has been shooting a series of weekly matches not to exceed eighteen) of twenty balls each, for two gold medals, to be known as first and second champion medals, the winners in each match to wear the same metal beaten; and a member was required to shoot in at least thirteen of the matches to make him eligible for final possession, the awards to be made on percentage of hits. The shooting closed yesterday with the sixteenth match, Mr. Millington being three balls in the lead, which could not be overcome by a clean score from Mr. McLeod; and Mr. Woodbury, the only other possible winner, having been called away from the city, was unable to complete his score. As shown by the scores, but three members shot the required minimum of 260 balls, but I give the result of the other shooting to show the general average and what our club is capable of doing. The average of 1874 we consider quite creditable for amateurs, many of whom had never shot from a rotary target until this season, and some of them had never shot from any target.

whatover. The trap was a Card rotary, screened; handicap rise, as shown below:

Yards Rise.	Shots.	Hits.	Per cent.
E. L. Mills.....	25	320	.943
E. W. Wood.....	22	297	.945
Levi Woodbury.....	20	141	.936
T. E. King.....	20	190	.950
W. B. McFarland.....	20	193	.965
W. H. Eldridge.....	20	209	.945
H. L. Shepard.....	20	160	.800
P. F. Deane.....	20	169	.845
Jno. H. Nichols.....	20	129	.645
N. H. Wadsworth.....	20	120	.600
Total.....	1,910	1,897	.872

CANTON, N. Y.—Capt. Bogardus and Eugene shot before a crowd of at least 10,000 persons, Sept. 15, at our County Fair, and seven or eight thousand on the 16th. The shoot was the card of the whole Fair. Everybody was delighted with it. R.

MANCHESTER, N. H., Sept. 20.—Annual shoot of the Manchester Shooting Club, held on the club grounds in this city to-day. Purse No. 1, \$15; 40, 30, 20 and 10 per cent.; 10 balls, rotary trap:

I. A. Moore.....	10	A. E. Clarke.....	7
G. E. Morrill.....	10	H. Tobey.....	6
M. Wadleigh.....	9	C. L. Harmon.....	6
H. P. Young.....	9	R. F. Clark.....	6
C. H. Cross.....	9	N. A. Robinson.....	6
C. E. Dorr.....	9	C. G. Taylor.....	6
C. J. Darrah.....	7	Z. F. Campbell.....	5
J. Dolber.....	7	M. W. Farmer.....	4
E. B. Hubbard.....	7	C. G. Taylor.....	4
O. Greeley.....	7	C. G. Gilmore.....	1
C. C. Clark.....	7		

C. J. Darrah.....	4	O. Greeley.....	3
G. H. Hubbard.....	4	A. E. Clarke.....	3
J. Dolber.....	3	C. C. Clark.....	3

C. J. Darrah.....
First prize divided between Ira A. Moore and George E. Morrill; second between Moses Wadleigh, Charles A. Jackson, Hiram P. Young and C. H. Cross. The third was awarded to E. A. Durgin. For the fourth, C. J. Darrah, J. E. Dolber, G. H. Hubbard, O. Greeley, C. C. Clark and A. E. Clarke tied, and in shooting off Mr. Darrah won.

Purse No. 2, \$20—\$8 to first, \$6 to second, \$4 to third and \$2 to fourth; 10 balls, rotary trap:

C. L. Harmon.....	10	C. C. Clark.....	7
G. E. Morrill.....	10	J. Dolber.....	7
N. A. Robinson.....	10	H. P. Young.....	6
A. E. Clarke.....	9	J. E. Elliott.....	6
C. A. Jackson.....	9	H. Wheeler.....	6
M. Wadleigh.....	9	C. G. Taylor.....	6
H. Tobey.....	9	A. E. Clarke.....	6
A. Brown.....	8	C. L. Harmon.....	5
W. B. Parsons.....	8	C. G. Taylor.....	5
N. A. Robinson.....	8	A. Hall.....	4
E. G. Taylor.....	8	G. H. Hubbard.....	4
L. K. Mead.....	8	P. F. Deane.....	4
L. K. Mead.....	8	C. W. Farmer.....	2
A. Walker.....	8		

Ties on ten.....	2
B. F. Clark.....	2
J. E. Dolber.....	2
A. Walker.....	1

Second tie.....	3
B. F. Clark.....	3
L. K. Mead.....	3

Third tie.....	4
B. F. Clark.....	4
L. K. Mead.....	4

Fourth tie.....	5
L. K. Mead.....	5
J. E. Dolber.....	5

First prize divided between Messrs. Harmon, Morrill, Wadleigh and Clarke; second between Messrs. Jackson and Moore; third and fourth between Messrs. Tooley, Brown, Parsons and Robinson, and the fourth was won by Mr. Mead.

Club shoot for a gold medal and contributed prizes. Leather medal for poorest shot. Conditions, 20 balls, rotary trap. The medal will become the property of any member winning it upon three successive annual shoots:

F. J. Drake.....	20	C. H. Cross.....	14
M. Wadleigh.....	20	H. Tobey.....	13
C. J. Jackson.....	20	N. A. Robinson.....	13
C. H. Cross.....	20	C. L. Harmon.....	12
G. E. Taylor.....	17	L. K. Mead.....	12
H. P. Young.....	17	M. W. Farmer.....	12
W. B. Parsons.....	17	Z. F. Campbell.....	12
G. H. Hubbard.....	17	J. E. Wilson.....	12
B. F. Clark.....	17	A. E. Nicholson.....	11
C. L. Harmon.....	15	A. Walker.....	9
G. E. Morrill.....	15	J. E. Elliott.....	9
H. L. Hubbard.....	15	C. G. Taylor.....	9
E. L. Hubbard.....	15	B. Littlefield.....	9
O. Greeley.....	15	L. Simons.....	6
E. A. Deane.....	14	C. S. Massee.....	6
A. Brown.....	14		

Ties of twenty.....	4
F. J. Drake.....	4
M. Wadleigh.....	4

Second tie.....	3
F. J. Drake.....	3
M. Wadleigh.....	3

Ties of fifteen.....	3
C. J. Darrah.....	3
T. S. Whitney.....	3
A. Durgin.....	3

Second tie.....	2
C. J. Darrah.....	2
T. S. Whitney.....	2

The first prize, won by Frank J. Drake, the club gold medal valued at \$40; the second, a silver pedometer, was awarded to Ira A. Moore; the third, a silver-mounted revolver, to P. F. G. Taylor; the fourth, a bronze setter dog, mounted as a paper weight, to Dr. W. B. Parsons; the fifth, a nickel-plated cartridge holder and extractor, to Charles J. Darrah (Dr. Parsons and Mr. Darrah afterward exchanged prizes by mutual agreement); the sixth, ten pounds of powder, to Mr. A. Brown and Mr. C. H. Cross; and the seventh, the leather medal, to C. L. Harmon.

Purse No. 3, \$10—\$4 to first, \$3 to second, \$2 to third, and \$1 to fourth; 10 double balls.

C. J. Jackson.....	10	A. E. Clarke.....	10
M. Wadleigh.....	9	B. F. Clark.....	9
H. Wheeler.....	7	H. P. Young.....	7
C. H. Cross.....	7	C. L. Harmon.....	7
F. J. Drake.....	6	C. W. Farmer.....	6
I. A. Moore.....	6	Z. F. Campbell.....	6
A. E. Nicholson.....	6	E. Durgin.....	6
A. M. Parsons.....	6	L. K. Mead.....	6
C. J. Darrah.....	4	H. Tobey.....	4
E. L. Hubbard.....	4	A. Hall.....	4
C. Morrill.....	4	A. Hall.....	4
J. W. D. McDonald.....	4	L. Simons.....	4

Ties on seven.....	3
H. Wheeler.....	3
F. E. G. Taylor.....	3

Second tie.....	2
H. Wheeler.....	2
F. E. G. Taylor.....	2

Third tie.....	3
H. Wheeler.....	3
F. E. G. Taylor.....	3

Charles J. Jackson won the first prize, Moses Wadleigh the second, Dr. Henry Wheeler the third, and the fourth was divided between Frank J. Drake and Ira A. Moore.

limited to members who have competed for any of the purses and failed to win a prize:

B. F. Clark.....	14	C. C. Clark.....	7
S. S. Whitney.....	12	A. B. Nicholson.....	6
C. Greenwood.....	11	G. H. Hubbard.....	5
J. W. D. McDonald.....	9	C. G. Gilmore.....	4
A. Walker.....	9	C. S. Massee.....	4
C. B. Littlefield.....	8	A. Hall.....	3
Z. F. Campbell.....	7	H. Vickery.....	3
M. W. Farmer.....	7	L. Simons.....	1
J. E. Dolber.....	7		

B. F. Clark won the first prize, Eugene S. Whitney the second, Oliver Greeley the third, and the fourth was divided between Dr. J. W. D. McDonald and Alfred Walker. J. E. W.

SEDLA, Mass., Sept. 25.—The Sedalia Shooting Club held their first prize shoot, Saturday, Sept. 18; 18 yards rise, Mole trap, 20 glass balls each:

Shed.....	7	Parmerlee.....	13
South.....	7	Yold.....	13
Babcock.....	9	Kunn.....	12
Rosen.....	9	Truitt.....	12

Parmerlee was awarded the cup.

On the 25th the club had a competitive shoot, same conditions, resulting as follows:

Highlyman.....	13	Messery.....	10
Yold.....	14	Truitt.....	16
Barber.....	16	Montgomery.....	15
Parmerlee.....	16	Shed.....	14

The club is rapidly improving, and hopes soon to be able to report 18 out of 20.

PORTLAND, Me., Sept. 30.—At the tournament of the Maine Sportsman's Association, Pomeroy, of the Androscoggin Club, Lewiston, won back the diamond badge, and, it being the third time, he has a right to hold it. The second prize, a double-barrelled breech-loading fowling piece, was won by Winthrop S. Jones, of Peaks Island; third prize, \$22, C. L. York, Riverside Club, Brunswick; fourth prize, 250 pounds shot, to H. C. Harmon, of Forest City Club, Portland; fifth prize, \$13.75, J. F. Randall, Peaks Island Club, Portland; sixth prize, half a case of powder, P. J. Brickett, Peaks Island Club, Portland. In the glass-ball shoot, Androscoggin Club of Lewiston; seventh prize, \$8.21, M. L. Brackett, Peaks Island Club, Portland. In the glass-ball shoot, sweepstakes, the first prize, \$3, was won by Benjamin J. Willard, of Peaks Island Club, Portland; second prize, \$5.80, to A. W. West, Forest City Club, Portland, and third prize, \$3.20, to P. J. Brickett, Androscoggin Club, Lewiston.

CHICAGO, Oct. 1.—The second match between the Austin Gun Club of Austin, and the South End Shooting Club of Chicago, took place at Grand Crossing, Wednesday last. The conditions were: fourteen men on each side, wild birds, 25 yards rise, from plunge traps. A strong wind prevailed, which greatly assisted the birds in getting out of the way. The Austin Club killed eighty, the South End sixty-eight. This was the second match of the series, the first score being 109 to 107 in favor of the Austin Club.

BROOKFIELD, Mass., Oct. 1.—The Sportsman's Club have a union shoot next week at the Park, and have invited clubs from Spencer, North and West Brookfield, Ware and Palmer. Each town is to furnish a team of at least ten, who shoot team against team. All other members of the different clubs will also have a chance to shoot at the regular string of 30 balls. The shooting begins at 10 a. m., and if a fine day, a large crowd is expected, and a good day is sport anticipated.

LEAVENWORTH, Kan., Sept. 29.—The Leavenworth Gun Club held its regular shoot yesterday afternoon on the reservation. Each man shot at ten stationary and ten rotary balls:

E. Haberlein.....	17	J. F. Schneider.....	8
A. Vermer.....	16	E. L. Carney.....	8
D. B. Hinman.....	16	A. Lange.....	8
W. C. Hinman.....	16	Scott Lee.....	17

W. C. Hinman won the champion medal with 19 out of 20. He used an army musket. E. Haberlein and Scott Lee tied, and Haberlein won the second prize. Ed. Carney won the leather medal.

October 1.—The Leavenworth Gun Club had its shoot yesterday on the fair grounds as advertised, each member shooting at ten stationary and ten rotary balls, thrown from two "Monarch" traps:

E. Haberlein.....	15	A. Vermer.....	12
W. C. Hinman.....	19	B. C. Hinman.....	9
L. E. Carney.....	16	E. L. Carney.....	16
D. B. Hinman.....	16	Chas. Schneider.....	16
W. C. Hinman.....	16	G. Geo. Bringer.....	13

W. C. Hinman won first prize (a Monarch trap, donated by Culver Bros., valued at \$10). E. Haberlein and D. B. Hinman tied on 18 balls; Hinman won second prize in shooting off the tie, breaking 5 straight, and Haberlein 4. Chas. Schneider and Chas. Mague tied, which was not settled. After the glass ball match was over, some members of the club had a sweepstakes race on foot, which J. W. Sprattley won first money, and W. C. Hinman second.

SACRAMENTO, Cal., Sept. 24.—The shooting tournament, under the auspices of the Forester Club of this city, which opened Tuesday, has passed most pleasantly, and free from anything to mar its complete success. Nearly every section of the State was represented. Entries were made of clubs at Colusa, Franklin, Roseville, Willys, Placerville, Colusa, San Joaquin, San Francisco, Chico and other parts of Butte county, Cloverdale, Georgetown, Newcastle, Vacaville, Pilot Hill, Napa, White Rock, Sheldon, and from other points, in addition to those from this place. Forty-five contestants took part in the shooting. The conditions were: fifteen birds each at 21 yards rise, using three plunge traps of the H. & T. pattern. J. N. Burnett and Geo. Rottier tied for first prize on 15 straight, and shot off tie at 6 double birds, 18 yds., Rottier winning with clean score. Among seven ties on 14 P. D. Brown won the shoot off with clean score of 6 double birds at 18 yds. The tie of four being shot off and the prizes awarded. Scott, Todd and Zaves divided 4th, 5th and 6th; W. E. Gerber, 7th; Lopez and Wentworth, 7th and 8th; Schnabel and Thiel 10th and 11th; Derr, 12th; Parrot, 13th; Beise, 14th; Chip, 15th; Chapman, 16th, and Meyer Ernest 17th and 18th. A supplementary match for a case of birds was shot under novel conditions. Each shooter started to walk from the 33 yd. score, and while between that distance and the 28 yd. score the trap was sprung.

OCCIDENT.

PUBLISHER'S DEPARTMENT.

THE AUTOMATIC REVOLVER.—Messrs. Merwin, Hubert & Co., 88 Chambers street, New York, make to the readers of this paper an unusual offer, which they accept by reading their advertisement in another column. The weapon is perfection of workmanship, and will be highly prized by every purchaser.

DECK SHOOTING.—One-half the shooting in and of the best clubs of six members in Chicago, N. C., to get this season with bats and decoys. Splendid chance; no better; canvas-back shooting. Address Box 2, 163, Boston.

THE HOLBIRD SHOOTING AND FISHING SUPPLIES. Upthegrove & McLellan, sole manufacturers, Valparaiso, Ind. Send for circular.

—See advertisement of gold fish for sale.

The Kennel.

—Address all communications to "Forest and Stream Publishing Company, New York."

FIXTURES.

St. Louis Kennel Club, St. Louis, Mo., Oct. 5th, 6th, 7th, and 8th. Pennsylvania State Field Trials Association Trials, Lancaster, Pa., Oct. 26th, 27th, 28th and 29th. J. R. Stanyon, Secretary, Pittsburg, Pa.

National American Kennel Club's Second Annual Field Trials, Vincennes, Ind., Nov. 15th. Chas. De Ronge, Secretary, 51 Broad street, New York.

Eastern Field Trials Club's Second Annual Trials, Robins Island, Peconic Bay, L. I., Nov. 29. Jacob Pentz, Secretary, New York.

ST LOUIS SHOW.—As we go to press the St. Louis Bench Show is in progress. A full report of the same, with list of entries and winners will appear in our next issue.

NAMES OF DOGS.—Correspondents are requested to exercise care in writing names claimed and other kennel notes. Remember that it is very easy to misunderstand communications of this kind unless they are written plainly and explicitly. The editor would prefer rather to read a page of manuscript in order to understand exactly what the writer means to say, than to puzzle over a brief note in which the names of owner, sire, dam, former owner, etc., are bunched in a conglomerate and undecipherable mass.

Advertisers are respectfully requested to print names of dogs.

PENNSYLVANIA FIELD TRIALS.—We have received a neatly printed little book containing the Constitution, Laws and Rules of the Pennsylvania State Field Trials Association. The rules of the club specify that:

A dog to be eligible to run in the field trials of the association must have been owned in the State of Pennsylvania at least three months prior to the date of the commencement of the trials. A puppy whelped on or after April 15 of the previous year shall be eligible to run in the puppy stakes, and one whelped on or after October 15 shall be eligible for the nursery stakes.

The rules for the field trials are made up with slight alteration from both the National American Kennel Club and Eastern Field Trials Club recently published in FOREST AND STREAM, and in consequence it is not necessary to reproduce them in full. The principal changes alluded to occur in Rule 5, and in the "instruction to judges," under the heading of False pointing; the paragraphs read as follows:

RULE 5. Positive points for merit: Pointing, 35; pace, 15; backing, 7; style, 6; staunchness, 8; ranging, 5; quartering, 8; obedience and disposition, 6; retrieving, 10; total, 100. Negative points for demerit: False pointing, 1 to 5; breaking in (each offense), 5; breaking shot (each offense), 5; chasing or breaking shot and chasing (each offense), 12. (False pointing)—The judge shall give a dog ample opportunity to discover whether or not he is on a true point, and the penalty shall range from 1 to 5 for his acts throughout the heat.

Mr. J. R. Stanyon, Secretary, telegraphs us that the following gentlemen have consented to act as judges: Mr. B. F. Wilson, of Pittsburg, Pa.; Mr. J. M. Taylor, of Lexington, Ky., and Mr. Washington A. Coster, of Flatbush, Long Island.

A VALUABLE PRESENT.—Mr. T. T. Sawyer, Jr., of Boston, Mass., has just returned from England, bringing with him a young fox terrier bitch, which was presented to him by Mr. Hugh Dalziel. She was bred by Mr. Arthur A. Easton, of Hull, England, and is in every respect one of the finest of her breed in America. "Jumping Jenny," as she was named by Mr. Dalziel, has white body and head evenly marked with black and tan. She is by Champion Gaffer, 6,942, E. K. S. B., out of Champion Gerty, 7,004, E. K. S. B. Her sire, Gaffer, has won thirty-two first prizes, and her maternal grand sire and granddam, Bullett and Gaily, were sold at Darlington show for £350.

WESTMINSTER KENNEL CLUB IMPORTATION.—Mr. R. B. Summerson is about sending over his pointer bitch, Polly, by his Champion Shot, to the Westminster Kennel Club. Polly will have plenty of opportunities of showing her excellent working qualities this autumn, and in the spring she will be ready for Sensation.

REX.—Mr. Fisher Howe, Jr., writes us that his pointer Rex is doing fairly well. Within the last few days he has begun to rest a little on his foot, and has recovered heart enough to bark once or twice.

ESSEX COUNTY HUNT.—Meets for October, 1880, at 3:30 p. m., each fixture: Saturday, October 9, Verona Post Office. Wednesday, October 13, Llewellyn Park—Gate, Eagle Rock Road. Saturday, October 16, Mountain House, Montclair. Wednesday, October 20, Residence C. H. Heckscher, Esq., Orange. Saturday, October 23, South Orange. Wednesday, October 27, Mansion House, Orange. Saturday, October 30, Caldwell. H. N. MEXS, M. F. II.

ELCHO AND ROSE.—Dr. Wm. Jarvis, of Claremont, N. H., has forwarded to us a neat little pamphlet containing the pedigrees, public performances, etc., of his celebrated red Irish setter, Champion Elcho and Rose. The little book also contains a full history of this race of extraordinary setters, whose winnings have been so often recorded in these columns. We will take pleasure in giving all inquiring readers information concerning this famous strain.

—Mr. Hugh Dalziel has recently accepted the kennel editorship of the *Fanciers' Chronicle*.

—Mr. Jefferson Cooper, of Blaauveltville, N. Y., is at Milford, Neb., with three of Dr. S. Fleet Spier's dogs.

—Mr. Zachary Taylor, of Northumberland, Pa., is at Lincoln, Neb., with one dog.

THE ENGLISH SETTER

FROM VERO SHAW'S ILLUSTRATED BOOK OF THE DOG

[Reprinted from advance sheets forwarded to the FOREST AND STREAM exclusively, by the author, through the courtesy of Messrs. Cassell, Petter, Galpin & Co., Publishers.]

WHATEVER the origin of the setter may have been, there can be no possibility of a doubt but that he holds a position second to none in the canine world in the present day. The beauty of the dog's coat and the brilliancy of his colors, coupled with his use and intelligence in the field, cannot fail to make the setter a favorite with all who really admire and love a good dog.

Another important feature in connection with the setter's popularity, and which has been no small support to it, is the amount of national jealousy and prejudice which has been from time to time imported into discussions on the breed, as, naturally enough, each variety in existence finds keen supplemending work among its fellow countrymen. To explain our meaning we have only to allude to the fact that in the present day setters are divided into three distinct classes, viz., the English setter, the Irish setter and the Gordon setter. This latter breed is recognized as the Scottish national setter, its origin being traced to Gordon Castle, Aberdeenshire, and will, with its Irish relative, be fully alluded to later on in this work. There was an old Welsh breed, too, of black-and-white setters which is almost extinct, though frequently pathetically alluded to by veteran sportsman hailing from the Principality in question.

In various localities throughout the country families or strains of setters from special lines adopted in breeding—doubtless with the object of producing the dog best suited to the specialities of the country over which they were to be worked—assumed peculiarities distinguishing them from each other and became known by special names, such as the kennels which became known for breeding good ones. The Earl of Carlisle has a strain, specimens of which have occasionally been shown, and which display strongly marked Spaniel characteristics, and from the tendency to curl in the coat, the top-knot more or less developed, and their general shape, suggest them having been grafted on the Water Spaniel. In the Marquis of Bute's kennel in the west of Scotland there was long, and probably still is, a strain of black setters, and numerous kennels of extent had strains specially their own and some distinguishing feature. The Beltons, famous in the northern counties, are a superb race, and form the great base of the now famous Laverack Setter, on which again is founded the majority of the great kennels, so favorably known throughout the country, and which has an immense popularity with American sportsmen.

Whether any of the modern and present-day breeders have resorted to a spaniel cross direct we are not in a position to state, but that such might be done with ad-

In spite, however, of the numerous families into which the setter is now divided, there can be no doubt that the origin of each was the spaniel, and it is a curious subject for conjecture, whether the *English* setter (the hunter or pointer) should have the credit of supplying us with the three breeds of sporting dogs—spaniels, setters and pointers—upon which we English so greatly pride ourselves. The credit of improving these dogs is of course our own, but it is impossible to claim any one of them as indigenous to this country, closely identified with it as they are at the time of writing.

John Crains alludes to the setter in his work on "English Dogges," under the title of Index, and his classification of it with the spaniel is convincing proof of its identity with that animal at the period in which Dr. Crains wrote as follows: "Another sort of Dogges be there, seruiciable for fowling making no noise either with foote or with bounge, whyles they followe the game. These attend diligently vpon theyr Masters and frantly crye out vnder theyr becke, motions and gestures, they shall please him to exhibite, and theyr going forward, drawing backward, inclining to the right hand, or yielding toward the left. (In making mention of fowles my meaning is of the Partridge and the Quail) when he hath founde the byrde, he kepeth sure and fast silence, he staveith his steppes and will proceede no further, and with a cleare and shrill voyce, layeth his eare to the grounde, soe creeping forward he will staye. When he hath perceiue to the place where the byrde is, he layeth him downe, and with a marcke of his pawes, betrayeth the place of the byrdes last abode, whereby it is supposed that this kinde of dogge is called *Index*, Setter, being in deede a name most consonant and agreeable to his quality. The place being knowne by the meanes of the dogge, the fowler immediately openeth and throweth out his net, and the byrde being thus caught, the dogge at the accuscoud becke doth vsually signe his Master ryseth vp by and by, and draweth nere to the fowle, that by his presence they might be the authors of their owne insaring, and be ready intangled in the prepared net."

The above extract, though not throwing much light upon the appearance of the breed in the reign of Queen Elizabeth, nevertheless is a proof of its existence; but the following remarks taken from Gervase Markham's "Hunger's Prevention, or the Art of Fowling," which was published in London in 1655, gives a considerable amount of information upon the dog's character and the uses to which it was then placed. Under the heading of "What a Setting Dog is" Gervase Markham writes:

Before I wade further into this discourse I show you what a setting dogge is. You shall then understand that a setting dogge is a certaine lusty and spinnell taught by nature to hunt the partridges being, and more then any other chase whatsoever, and that with all eagernes^s and fiercenesse, running the fields over and over so lustily and busily as if there were no limit in his desire and turie: yet so qualified and tempered with art and obedience, that when he is in the great and wide pursuit he seems to be most wide and untrunkite, that yet even then he heares some of his masters voyce makes him presently stand, gaze about him, and looke in his masters face, taking all his directions from it whether to proceede, stand still, or retire. Nay, when he is come even to the very place where his prey is and hath as if were his nose over it, so that it seemes he may take it up at his owne pleasure, yet is his temperance and obedience so made and trained by art that presently even on a sudden he either stands still or falls downe thutte upon his prey, and then he is so much more busily and busily to the noyse or motion at all, till that his master come unto him and then procedes in all things according to his directions and commandments."

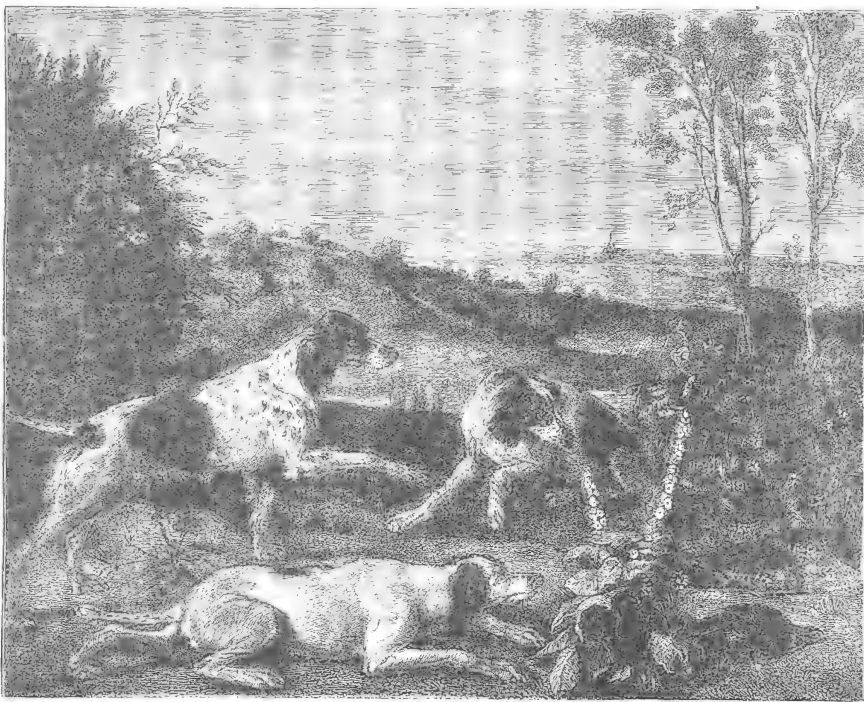
This quotation might almost have been taken from a modern work on setters, as it refers to a class of dog whose duties in the field appear to have little altered during the progress of time. There still seems to have been a considerable looseness in the classification of this breed of dog, and the barrier be-

"Sportsman," in which a good deal is said about the setting dog, and sporting in general. The "Compleat Sportsman," which was published in the *Steele*, London, was dedicated to Sir Charles Knyvis, of Keven-Mabley, in the County of Glamorgan, Bart., and may be taken as having been a valuable handbook relating to the laws on sport and dogs at the time it was written. Giles Jacobs, however, copies unblushingly from Nicholas Cox, and it is not fair to give credit for what he has taken from his works, and the result is that the description of the setting dog which we have quoted above is reproduced in the "Compleat Sportsman." It is, therefore, only reasonable to infer that no change, or, at all events, any material change, had come over the dog during the interval which had expired since Nicholas Cox wrote, or, at least, probably had been alluded to by Giles Jacobs in his work.

It may be here mentioned in justice to the individual to whom the credit is due, that Robert Dudley, Duke of Northumberland, is supposed to have been the first person to train setting dogs in the manner which has since his time been universally adopted by his successors. His Grace lived about the year 1560, rather earlier than the date at which Dr. Cuius wrote, but beyond casual references to him by subsequent writers, nothing is positively known of the system upon which he brought the rounks made it. It is probable that his ideas were closely carried out by the setter brevers who came after him.

The "Sportsman's Cabinet," in 1803, devotes good deal of its space to the subject of setters, which had evidently by that time taken their rank as a distinct breed of sporting dog. Whether, however, the author is quite correct or not, in his assertion that "The dog passing under this denomination [setter] is a species of pointer originally produced by a commixture between the Spanish pointer and the larger breed of English spaniel," will always be a matter of discussion between persons interested in the breed, as many are to be found

who deny the existence of the pointer cross. This subject may, however, be abandoned for the present, as our desire is not to discuss the merits of the English setter from its first appearance down to modern periods, and at the same time draw what deductions we can from contemporary writers concerning its appearance and value as a sporting dog. Mr. W. Taplin, in the "Sportsman's Manual," proceeds to remark, "The pointer is subsequently to the preceding quotation, that 'The sporting department of a squire in the field precisely corresponds with the pursuits and propensities of the pointer, but with this useful variation, that additionally their olfactory sensations are more exquisite, and that one can discover and as expeditiously receive and enjoy the particles of scent or, in other words, the effluvia of the game; as readily and at equal distance with the other, the difference of the sense of which they are judiciously employed.' It is therefore necessary that one should effect upon his legs what the other does by prostration upon the ground, in the very position from which the present application of the 'setting dog' is derived. And these are neither more nor less than the precise effect of the situation; for as in slouching with the pointer



DOGS AND PARTRIDGES (*After Desportes*).

tween the setter and the spaniel appears to have been unremoved at a much later time, and the name setter applied only to dogs broken to set game, and not to those distinguishable by any structural difference in shape or build. In 1697 Nicholas Cox writes of the setter in "The Gentleman's Recreation" in the following words:

"The dog which you elect for setting must have a perfect and good seal, and be naturally addicted to the hunting of feathers; and this dog may be either land spaniel, water spaniel, or mongrel of them both; either the shallow-dewed hound, tumbler, lurcher, or small bastard mastiff. But there is none better than the land spaniel, being of a good and nimble size, rather small than gross, and of a courageous metal; which, if you cannot afford to buy one, yet, you may very well know from a right breed, which have the same qualities, strong, lusty and nimble rangers, of active feet, wanton tails, and busie nostrils, whose tail was without weariness, their search without changeableness, and whom no delight did transport beyond fear or obedience."

With reference to the behavior of this dog in the field, Nicholas Cox remarks as follows in his notes on training the setting dog :

"You must teach him to come creeping to you with his belly and head close upon the ground, as far or as little away as you think fit." * * * And this observe in his creeping to you, if he offer to raise his body or head you must not only thrust the rising part down, but threaten him with your angry voice, which if he seem to slight, then add a sharp jerk or two with a whiplaced lash. When he walk abroad, if he be so bold as to raise his body, or even to turn his head, busy speak to him, and in the height of his pastime make him fall upon his belly and lie close, and after that make him come creeping to you."

Thus Nicholas Cox succeeds in clearly proving that late in the seventeenth century the spaniel, or even a mongrel partaking of any breed, was used as a setting dog by British sportsmen. Things do not appear to have undergone any great alteration in the beginning of the next century, for in 1718 one Giles Jacobs produced a book called the "Complaine

"Although the setting dog is in general used merely for the purpose of taking partridges with the draw-net, yet they are sometimes brought into occasional use with the gun, and are equally applicable to that appropriation, except in turnips. French wheat, standing clover, ling, furze, or other covert, where their sudden drop and point may not be so readily observed."

Personally we attach very great importance to the above extract, for two reasons: First, it is distinctly stated that up to that time Pointers were the fashionable, or rather the favorite, breed with sportsmen who amused themselves by shooting three-quarters of a century back; and, secondly, it gives us a good reason for the change which has come over the game in the field of later years. It is, of course, perfectly well known that the Setter is usually pointed his game standing up, as a pointer does, and the demerit of netting is unquestionably responsible for this alteration in the method of a Setter carrying out his work. Before, when the sportsman was anxious to net as many birds as possible, it was most essential that they should be as undisturbed as possible, and the presence of a dog would, of course, be a great hindrance. Therefore, when the dog was near the net was fixed for their capture. Now, when the dog is being seen by the game was naturally lessened when he lay down, and this, no doubt, was the reason for him being broke to do so. Now things are much altered, and the sportsman only wants the whereabouts of the game to be indicated, so that he may walk them up. There is, however, a perfectly good reason for the dog to crouch still observable in many of the best and highest birds of the present day, which is unquestionably accounted for by the former habits of the breed, and the uses to which it was put.

From the following remarks of Mr. Taplin it will be seen that in the early years of the present century the Setter was credited (as he is by many in the present day) with being naturally of timid and nervous temperament, for he writes:

"It has already been observed that the setter is in posses-

man. Mr. Grace soon treated the howling with great care. Two leg hits for four, and a couple of cuts for three, were quickly added by him, and Mr. Lanes sent the ball to square leg for four. Twenty-one runs were the outcome of eight overs delivered by Mr. Palmer, consequently he relinquished the ball to Mr. Boyle at 203. Eight runs were produced in three overs and a half, and then Mr. Lanes was unfortunate enough to play the ball on. His hits included five fours and nine twos. Barnes was most warmly greeted on proceeding to the wickets. He led off with a fortunate snick for four. The Australian wicket keeper was twice struck with the ball, once by each bowler. He bore these knocks with fortitude, however, and stuck to his post. A clever drive for four along the ground by Mr. W. G. Grace off Mr. Boyle followed, and Barnes was accredited with a snick for two. His first good hit was made off the next ball by a crisp cut for three from Bannerman. Mr. Grace obtained an off-drive for four from the professional, and then hit the ball almost straight to the pavilion. Mr. Alexander tried to catch it, but failed; the chance, however, was exceedingly difficult. As Mr. Boyle was punished far too much to suit the colonials, he, at 254, resigned the ball to Mr. Palmer. Barnes secured a couple of cuts and an on-drive, for which nine were registered. These hits were backed up with an off-drive for four by the Gloucestershire captain. As runs were still coming rather quickly, Mr. Alexander was put on instead of Bannerman at 263. This proved a most judicious tactic, as the third ball Barnes cut into his wicket. Three down, Lord Harris was heartily cheered on his way to the wicket, and the first ball he received he drove to the on for a couple. Mr. W. G. Grace hit the first ball of Mr. Alexander's second over to the off for four, and the last he cut with a like result. A single was then added by him, which caused him to face the onslaughts of Mr. Palmer, who was bowling with great precision—so much so, that he quite beat Mr. Grace with a ball that took his off-stump. This closed one of the best exhibitions of batting that the Gloucestershire player has ever shown. It occupied four hours, and was composed mainly of a dozen fours, ten threes and fourteen twos. Lord Harris was joined by one of his own countrymen, Mr. F. Penn. The former secured a leg-hit for four, and a straight drive of the like value by him shot the total past 300 at 4.45. The spectators showed their appreciation of this by long and continued applause. After a maiden had been sent down by Mr. Palmer, Bannerman received the ball from Mr. Alexander. Both batsmen continued to hit with considerable skill, and it was thought highly probable that another long stand would be made. Mr. Penn cut each bowler for four, while Lord Harris hit a ball of Mr. Palmer's very nicely to square-leg for a similar sum. This brought Mr. Boyle on again. Mr. Penn hit Bannerman to leg for four, but the bowler was avenged by the very next ball, which bowled him. Fire for 322. Mr. A. G. Steel came, and once more the batting triumphed. Four fours (three of them from Lord Harris by drives and a cut, and one to Mr. Steel by a drive) were the most notable items in the dozen overs which followed, and at 355 Mr. Palmer once more tried his hand in lieu of Mr. Boyle. This seemed quite to the liking of Mr. Steel, who cut the first and last balls of his third over for four each. Mr. Alexander was consequently put on at 389, Mr. Moulie a few overs before having relieved Bannerman. Mr. Steel cut the first ball of the former change for four, while in the next over Lord Harris made a grand drive to the boundary, which caused the "400" to be hoisted. A slight drizzling rain now fell, but it was not sufficient to interrupt play. Mr. Steel having hit a ball of Mr. Moulie's to square leg for four, was deprived of the company of Lord Harris, who played the ball into the hands of slip. Six for 504, no less than 82 having been added since the fall of the previous wicket. Mr. Steel only outlived his captain for three overs, when a fine catch high up by mid-on disposed of him. Seven for 410. The Hon. A. Lyttelton and Mr. G. F. Grace were now associated, but the partnership was brief, as before even a single had been added Mr. G. F. Grace was taken at mid-off. The day's play was now at an end, 410 runs having been recorded at the cost of eight wickets.

The slight ruin of the previous evening had no appreciable effect on the wicket on Tuesday, when the weather was again fine. Shaw was deputized to aid Mr. Lyttelton in the batting at five minutes past eleven o'clock. This he did not do with much satisfaction, as the first ball of Mr. Monie's first over took his leg stump. Nine for 413. The bowler at the opposite end was Mr. Palmer. Morley, the last man, added a couple of runs (one from an overthrow), and Mr. Lyttelton, who was the last batsman, put on a cover-point for three and a single, when, in attempting a run, he was out. It should have been easy enough to get, Morley was run out at 11.29. Total, 426. Duration of innings, five hours fifty-five minutes.

Twenty minutes elapsed before the English took the field. Bannerman accompanied the captain, Mr. Murdoch, to the wickets, they being loudly cheered on their way thither. Morley delivered the first over, which was rather roughly dealt with by Bannerman, who hit the first two balls to leg for four each, and secured a single from the third. He continued to hit well, and the first twenty-eight run (which, besides the hits mentioned, included two others to leg and an off-drive for four, and a cut for three), were all made from his bat. A great misfortune now befell the visitors, as Mr. Murdoch was wonderfully well caught by Barnes at mid-off. One down. Mr. Groube appeared, and a quick chance was soon given by Bannerman to Morley at forward short peg. This opportunity was not, however, embraced by the Notts professional. A single only came from the four following overs. Bannerman then made a cut for three, and four more were placed to his credit, three of them being the result of an overthrow. Another slight chance was given to Bannerman to elin-bat, although this was not accepted, he did not profit much by it. This is the first ball of the very next over upast his leg stump. Three for 33, the score being a single out, as the number must have been even, as the batsmen were at the same ends at which they started. Mr. McDonnell joined Mr. Groube, who cemented the partnership with a cut for three, and soon afterward made a similar hit for four. Mr. McDonnell in the meantime had obtained eight by a couple of square-leg hits and a nick. The total having traveled to 59, a ball of Mr. Steel's, with a good pitch, rose much more rapidly than Mr. Groube had calculated, and took off his stump. Mr. Slight partnered Mr. McDonnell, and at 62 Shaw supplanted Morley. The first-named batsman had a narrow escape of being run out in the second over of the change, but the ball was badly returned. This batsman then drove a ball of Shaw's over the heads of the crowd in the direction of the tennis court. At 84 a double variation in the attack was tried. Shaw crossed over to the northern wicket, and Morley went on at the pavilion end. The latter was in the right direction. The second ball Mr. Slight played into the hands of third man, and

the fourth Mr. Blackham returned very hard to Morley, who secured it admirably with his left hand high up. The bad fortune of the Australians stuck to them, as Mr. Morley was well taken at mid-on at 89. Messrs. Rountree and Boyle were now in possession, and the former played a few balls in a style which threatened to give the catching party some trouble. He was prevented from doing so, however, by splendidly judging catch at long-field on by Mr. G. F. Grace; the ball seemed to hang a long time in the air, but the field-man waited far and cleverly secured it. Seven for 97. Mr. Palmer appeared on the scene, and four bays caused the three figures to be signalled on the telegraph board. Mr. Boyle continued to bat in pretty good style, relieving the monotony of singles with a drive to the rails in front of the pavilion. Mr. Steel resumed in place of Shaw at 112, but the other lowly clean bowled Mr. Palmer when a single only was added. Mr. Alexander's efforts were not particularly successful, as, with the addition of thirteen—six of them from his bat—he collapsed through a very smart catch in the slips close in. Luncheon now intervened, Mr. Boyle being not out twenty-two. Mr. Morley, the last man, joined Mr. Boyle afterward. The latter made a drive for four, and a snick for a like sum. At 142 Mr. Grace relieved Mr. Steel, and after an addition of seven runs, Mr. Morley played a ball of his to short-leg, where Morley caught it. Total 149. Time, three weeks. Duration of innings, two hours thirty-five minutes.

The wide differences of result at the close of an innings, which was enough to dishearten any team, but the Australians did not show the white feather at all. The same order was not preserved in the first venture, Bannerman being accompanied to the wickets by Mr. Boyle. Shaw and Morley were this time entrusted to open the attack. The second ball delivered by the fast bowler struck Mr. Boyle severely on the hand. Bannerman then cut Morley for four and then, and this, with a single to him, was the only contribution made when he struck the ball to square-leg, and Mr. Lucas ran from mid-on and caught it. The senior captain, Mr. Murdoch, now came in and caught it. The unfortunate witness of the downfall of two of his companions, Mr. Beck, started for a second run, but the ball was promptly hit by Mr. Grace to Morley, who put the wicket down before the batsman had got within the crease. This disaster was quickly followed by another, as Mr. Groube was admirably caught in the slips without having scored. Two for 13, then 14. It now came exceedingly likely that an easy one-innings victory was in store for England. Mr. McDonnell argued to the assistance of Mr. Murdoch, and both batsmen played skillfully and carefully. Five runs were put down to Mr. Murdoch, four of them from an overthrow which sent the ball to the boundary. After this mishap the fielding became exceedingly good, but both batsmen continued to play the bowling with confidence. Mr. Murdoch made two cuts for four each, and Mr. McDonnell emulated this performance by making four drives, from which no less than sixteen runs accrued. This caused a feeling of dissatisfaction in the breasts of the attackers, and Barnes consequently relieved Morley at 51, and Mr. W. G. Grace did the same kind office for Shaw a run afterwards. This did not at all interfere with Mr. McDonnell for some time, who made three four by midwicket and a cut. Mr. Steel followed Barnes at 59.

In the second over, Mr. Murdoch cut the ball past cover-point, and drove the next one to the on, from each of which four runs were gained. This, quickly supplemented with a square-leg hit for a single value, was Mr. Murdoch's first stroke. The next time Mr. Grace to the boundary, the ball striking near the same spot as the first. His downfall, however, came swift upon him after this, as the next ball he stopped with his leg, and an appeal for a bow by Mr. W. Grace was favorably answered. Mr. Slight's stay was brief and unprofitable; a grand catch by Lord Harris just in front of the ropes at long-off dismissing him. Five for 101, Mr. Blackham fared much better than he had done in the previous venture, and in conjunction with Mr. Murdoch, caused the bowling to undergo many changes. Mr. Stool gave way to Morley at 112, and a dozen runs later Shaw displaced Mr. Grace. This latter change did not suit, as each batsman cut the ball at four, and Mr. Blackham sent it to the on for a like sum. The slow bowler, therefore, was taken off for Mr. Lucas, at 133, and, without anything more, Mr. Blackham played the ball to "the doctor" at point. Six for 143. Mr. Bommer supplied the vacancy, and both he and Mr. Murdoch retained possession of the wickets until they were drawn, the total then being 170. Mr. Murdoch having made seventy-nine and his companion thirty.

A short day on Wednesday was fully expected, as 101 runs were left to the four unequalled batsmen to obtain to prevent the Australians suffering a single-innings defeat. The game was resumed at 11.15, Morley and Mr. Steel opening the bowling against the wickets, Messrs. Murdoch and Denner. The colonial captain soon gave evidence that he was in as good form as on the previous day. His first hit was a cut for four, and soon an off-drive for a like number was effected by him. His companion gave signs of not being comfortable with the bowling, and when eleven only were added to the overnight total he was altogether in the dark about a ball of Mr. Steel's, which clean-bowled him. Mr. Palmer, who followed, did not inspire his side with much hope, as he returned the ball to the smelter at 157. Eight down. There were still 84 runs required to prevent the innings defeat, and even the most sanguine friends of the colonials could scarcely have dared to hope that they would be got. Their wildest expectations were, however, more than realized. Mr. Alexander assisted Mr. Murdoch, and this, too, with a great measure of success. Mr. Steel was soon hit about with freedom, and at 217 he gave up the ball to Mr. W. G. Grace. The last arrival then sent Shaw to square-leg for four. This bowler then gave Mr. Murdoch a rather ugly knock, which delayed the game for a few minutes. The batsman, however, continued his hitting in a very plucky style and with the same measure of success. He completed his hundred shortly afterwards amidst the most deafening cheers of the spectators. Mr. Alexander, who at a critical point had batted in a careful and effective manner, was now forced to depart through a catch in slips. Nine for 239. When Mr. Monie joined the captain there were still 32 runs needed to prevent the single-innings beating. The fieldsmen were all on the alert, and most of them embraced themselves. The batsmen, however, played with corresponding care. The 250 was quickly gained, and Mr. W. G. Grace gave up the ball to Mr. Steel, whose first delivery Mr. Monie sent to square-leg for four. Morley was played with great confidence by Mr. Murdoch and the left-hand bowler had to make room for Shaw. This had the effect of lessening the rate at which runs were gained, but did not get the coveted wicket, so Morley came on again. This did not make any difference to the batsmen, and at five minutes past two

o'clock the deficiency in the first innings was rubbed out, amidst the greatest enthusiasm. A sharp run now nearly got rid of Mr. Murdoch, but the ball was returned to Shaw too wide for him to do anything with it. A complete change in the attack was resorted to at 207, Messrs. W. G. Grace and Lucas going on in place of Shaw and Murley. In the first named bowler's opening over Mr. Murdoch cut the ball for four, which sent the total up to 300 at 1.30. Other alterations in the bowling were effected. Mr. Penn, Mr. Lucas, and Barnes all trying their hands. The batsmen were by no means disconcerted, however, and when two o'clock arrived they were still unvanquished, the total being 323. After luncheon Mr. Steel and Barnes took charge of the bowling, and Mr. Murdoch gave the only wicket, but without making any use of the wicket-keeper, which was not taken. Mr. Monte did not think the game conclusive as he had done in the morning, and ten minutes further—sufficient to finish the venture. Mr. Monte having his stump knocked over. Total 327. The Australian captain was almost carried in by the crowd, who showed the most unbounded enthusiasm. The admission was quite justified by the remarkable performance made against the best bowling and fielding in England. His chief figures were one five, eighteen fours, three threes, and two twos.

The 57 runs necessary for England to win would not, was naturally thought, cause much trouble. It proved, however, a far more difficult task than had been anticipated. Mr. Lytton, the not-out of the previous innings, was sent in with Mr. G. F. Grace to commence getting them. Messrs. Boyle and Palmer took charge of the ball. The Australians were well on the *qui vive*, and considerable consternation was caused when, at his second ball, Mr. Grace was clean bowled, and thus got a pair of spectacles. One for 2. Mr. Lucas came, but his career was brief—caught at wicket. Two for 10. This was very bad, and a fear about two dreadful to think of took possession of many of the spectators. This feeling was intensified when at 22 Mr. Lytton was dismissed by Mr. Palmer. Three down, and not half the required number of runs obtained, was indeed a sorry outlook. Nine runs only were added, and then a double disaster befell England. Barnes being caught at mid-on, while Mr. E. M. Grace played on. Four and five for 33. Mr. W. G. Grace appeared on the scene, and slowly and steadily the total advanced. Mr. Pegg made two drives for four, and then gave a hard chance slip, which was not accepted. Mr. Grace also had a narrow escape of being caught and bowled. A cent for four was placed to the credit of the batsman. This left one run to win, which was obtained by the Gloucestershire captain at 4.15.

As a complete score was published in issue of Sept. 20, we refer our readers to our last number.

—\$25 in Doctor's visits will do you less good than one bottle of Hop
Bitters.

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FIXTURES.

Oct. 9—Washington Village Y. C. Fall Regatta.
Oct. 9—San Francisco Moul Y. C. Regatta.
Oct. 16—San Francisco Y. C. Closing Cruise to Martinez
Oct.—Dorchester Y. C. Union Ocean Regatta.
Nov.—Royal Bermuda Y. C. Cruising Trip Race.
Dec. 2—Royal Bermuda Y. C. Cruising Trip Race.

The Editor of these columns returns his thanks to the San Francisco Yacht Club for his election as an honorary member. The yachtmen of the Pacific Coast have shown so much enterprise in the introduction of the new, a rig which is destined in time to become popular on the Atlantic seaboard as well, and they have led the way in adopting iron centre-boards and outside lead, that we deem it an especial honor to hold the S. F. Y. C. burgee in our drawing office as a pleasant reminder of the compliment conferred.

TRIMMING BY OUR SAILS

[illegible]

In the East the centreboard has gone out of use entirely. Outside ballast has become a fixed stipulation in all contracts to build. Deep draft is the rule and large displacement is coming to the fore all over the country. More deadrise, less beam, an easy

J. T. Hornellville, N. Y.—Send to the American Net and Twine Co., Fulton street, New York.

W. D. Rice.—Several inquirers are referred to our news columns of last week for information about wild rice.

C. P. M., Worcester, Mass.—The address you ask for is as follows: J. H. Scott, Shirk, Yorkshire, England.

Suor, Brooklyn, Mr. George C. Colburn's Duke was bred by Mr. A. C. Waddell. He was a cross-bred, English, Irish and dord. Color, black and tan. Duke was by Colburn's Dash, out of Mullin's Belle; Dash, by Putnam's Dan, out of Valentine's Fanny; Belle, by Polhemus' Duke, out of Jane. In 1877, second prize New York Show.

W. P. S., Blue Point.—Write to the correspondent whose letter to the Game Bag department of our last issue answers your inquiry.

C. W. C., Colorado.—The dogs you refer to were Dandie Dinmonts, dog and bitch, imported by Mr. Robert Hume, Eastville, Northampton County, Va.

W. W., Milwaukee.—Have the lake trout caught in Lakes Huron, Erie, or Michigan scales on them? Ans. They do; all trout have scales. Try the skin, and you will see them plainly.

G. H., Hudson, N. Y.—The post-mortem description sent us is very good and clearly expressed. Your puppy died of pneumonia (or pleuro-pneumonia). This, however, is not the so-called "dog distemper."

J. S. K., Long Island.—Fred is full Gordon setter. Sire, Ponto, imported by Viscount Parker; dam, Diana, imported by Agent National Line of steamers. Nita is half Gordon and Irish, being out of Nellie by Plunkett, both imported by Dr. Goldsmith, of Rutland, Vt.

F. W. C., Hamburg, N. Y.—We regret to hear of the accident received by your setter. She is suffering from paralysis, the result of a spinal injury. Rest is probably all that can do her good. Without being able personally to examine her it is impossible to advise you further.

J. S. Z., N. Y.—We cannot advise you to cross a setter with a pointer, or a setter with a pointer. Of the two the latter is the best, and the get are called "dropouts." We have seen some wonderful field dogs that were dropouts, but we have also seen much better dogs that were purely bred.

C. B. D., Providence, R. I.—Your dog has internal cancer of the ear. The first thing is to remove any exciting cause that may exist, such as dirt, hardened cerumen (wax), etc. Syringe the ears with lukewarm water, and, in the case of hardened wax, use a little olive oil. Carefully dry with a soft cloth, and use liniment and treatment recommended to H. M. H., this column.

Norton, Evansville.—I have a Scott gun, with a 3-inch drop, and cannot catch a quick sight. 1. Can I have it straightened to 2½? without spoiling the looks of the gun? 2. Will the stock be just as hard and strong as ever? 3. Have you ever heard of any gun stocks being straightened with success? 4. What is the average drop of a gun? Ans.—1. Yes. 2. Yes. 3. Yes, dozens of them. 4. 2½ to 3½ inches.

F. W., Newark, N. J.—The description of your puppy's trouble is not sufficiently clear to determine the cause of the fit. Many young dogs are subject to them, and in time outgrow them. Fits are produced by worms. Try for them if you can discover any indication of their presence, and follow with castor oil. Feed on wholesome food and give plenty of exercise. Administer two grains of quinine three times a day for two weeks and write the result.

H. D. P., Brooklyn, L. I.—In a recent issue of FOREST AND STREAM you state that Putnam's Dan was by Palmer's Dash, out of Putnam's orange-and-white setter bitch Nell. Is this Stephen Putnam and Frank Palmer? 2. Are Putnam and Palmer alive? 3. As I have some of the above-named strain of dogs in my kennel, is the pedigree given a correct one? I have it, Putnam's Dan by Paul Mead's Old Dash. Ans. 1. Yes. 2. Yes. 3. Yes; Paul Mead's Old Dash was bought by Mr. Palmer from Dr. Mead.

C. E. K., Westfield, Mass.—I have a pointer dog who has had a cough since last spring. He coughs most while running about

after being let out in the morning. If he rests for a while, and then starts to run, he begins coughing again. His cough is a sort of gagging cough, and he raises a white frothy mucus. What shall I give him? Ans. Administer emetic of table salt—small tablespoonful. Follow with desert spoonful of sulphate of magnesia, and repeat the next day, and be careful in the dog's diet.

T. C. L., Rockingham, N. C.—Have you ever heard of a good gun of English manufacture having been burst by Dittmar powder? I have known several guns of American make burst with black powder, charge not exceeding 4 drs., if so much. I have used Dittmar for two years, and like it. May not the fault be in the gun, and not in the powder? Ans. If you have read the last two numbers of this paper, you are as capable of judging of the merits of the Dittmar powder as we are. One of the guns mentioned in letter of attorneys last week was of English make, and first-class at that.

H. M. H., Cincinnati.—For internal cancer use the following liniment, taking care to shake the bottle before the mixture is used: Gonard's extract of lead, one ounce; glycerine and carbolic acid, quarter ounce; finest olive oil, four and a half ounces. Avoid feeding meat, and the diet should consist partly of boiled green vegetables. It will be of advantage in treating cancer of the ear to give the dog Epsom salts, one drachm to three drachms, according to size of the animal, twice or three times a week. See answer to C. B. D., this column.

H. W. H., Brooklyn, N. Y.—As far as we can make out, there is no universal standard of what a cocker spaniel should really be. For months past we have been advocating the organization of a cocker spaniel club, which should regulate the standard and draw up a scale of points that will be looked upon as authority in this country. In next week's issue we will publish a letter from a cocker breeder, and other articles of a like nature are to follow; from these you must draw your own conclusions. Our kennel notes and advertising columns will acquaint you with the names of the leading breeders.

YELLOW LEGS.—1. Is a cocker spaniel good for quail and grouse? 2. What is necessary in training them besides charging and retrieving? 3. When is the law off on quail in Connecticut? Ans. 1. A cocker spaniel can be used with great advantage for woodcock in the brush and soon. For quail and grouse a setter or pointer should be used, although cockers are used to make the latter bird tree, and thus admit of its being "potted" by those who are not experts on the wing. 2. Having them mind explicitly, working always in range of the gun, and dropping to "wing" and "shot."

E. N., Newcastle, Pa.—I have a black setter dog, five years old, that is afflicted with some disease which I believe to be distemper. He seems very stupid, nose hot and dry, appetite good; have had him in the woods recently, and he seems to have completely lost his sense of smelling. What shall I do? Ans. The symptoms you give are not those of distemper. Possibly the dog is suffering from fever, the result of cold in the head. Give heating desert spoonful of sulphate of magnesia and repeat next day. Then follow with two grains of quinine three times a day for two or three weeks. Write result.

C. W. L., Northfield, Vt.—The pedigree of your English setter puppy is incorrect. Ex-Gov. Rice, of Massachusetts, never owned a setter bitch. We cannot refer you to better articles regarding the breaking of dogs than those published recently in the FOREST AND STREAM. In our kennel department of last week's issue you will find the instructions for breaking dogs taken from Mr. Shaw's "Book of the Dog." We refer you also to these hints, which are from the pen of Mr. James Fletcher, of Glenmarke Lodge, Huntley, Aberdeenshire, N. B., whose experience in breaking operations is both practical and extensive.

G. W. C., Bowling Green, Ky.—I had two setter puppies aged seven and eight months. They were taken sick, beginning to mope around. They had no appetite, and the skin, white of the eye and gums and lips turned yellow as gold. One of them died last night, and the other is very sick. What shall I do? Ans. Your puppy died of jaundice. The cause we are unable to indicate. It would, however, be worth your while to investigate the local or special conditions to which the puppies have been subject. If the remaining puppy is still alive, remove him to different location, and give

two grains of quinine four times a day, and also four small doses of calomel, three grains every twelve hours. Feed on broths, etc.

SMELTER, Boston.—I am surprised to see that your columns of "Sea and River Fishing" contain nothing about smelt fishing. I am a lover of the sport, and I would like to see a little said about it, because smelt fishing is about the most important fishing in Boston. Why is it? Ans. Evidently because no one writes on it. As you are so interested in it, let us have an account of how you do it, including lines, size of hooks, bait and all about it. The department to which you refer is mainly filled with correspondence, with an occasional editorial note attached. You can easily see that you are as much to blame in this matter as any one, for we do not write fishing stories. Try it and it may wake up some one to give their mode, and so we can all learn.

W. D. B., New York City.—1. Where in New Jersey will I get good quail and snipe shooting? 2. Will you also tell me what hills my Newfoundland pup, five months old? She is low spirited, no appetite, and after eating will vomit. Her eyes are also weak. Ans. 1. There are plenty of quail in all the Southern counties of New Jersey; also in Warren and Sussex. You will find difficulty, however, in shooting, as the farmers are opposed to city sportsmen. If by "snipe shooting" you mean what is known as "bay snipe shooting," the season has past. If you inquire about the English snipe shooting, it is very doubtful if sport of this kind will be had at all this season. Unless we have a three or four days' storm to wet the meadows, and that at once, there will be little snipe shooting this season. The meadows near Wardtown and Pine Brook are considered good spots. 2. Give a few doses of sulphur, large half-teaspoonful every ten hours, until three or four doses are given, then follow with castor oil.

J. E. H., Vermont.—Can you explain why my setter bitch fails to have puppies? She is four years old, and has had one litter of puppies when two years old before I owned her. On the last two occasions when she was in heat, I have had her served by a dog five years old. These are the only times the dog was ever put to a bitch. The first time it was nine days after she commenced to be in heat, and the second time it was twelve days. She was with the dog only once on each occasion, and then took the dog readily. The dog was in fine condition as to flesh, and the bitch rather fat. The question is, what is the trouble? Can it be that there is anything wrong with the dog? He is well bred, and the only one I know of in this vicinity, so I am anxious to use him. Should they be left together longer, or have I chosen the wrong time? She remains in heat from sixteen to eighteen days, and I have supposed that about the middle of this period was the correct time? Ans. Your bitch is probably too fat; reduce her in flesh by giving plenty of exercise. She should be warded twice on two successive days. The last third of her period is the proper time. It is unlikely there is anything the matter with the dog.

B., Newburg, N. Y.—Can Scotch staghounds be used to advantage in hunting deer in this country? If so, are they as good as our ordinary deerhounds? Is there a breeder in this country from whom I could get one? Ans. The Scotch staghound, as ordinarily trained, follows the deer by view alone, and would therefore be of no use in hunting in this country except on the plains, where the quarry can be kept in sight. They would, moreover, be too fast for ordinary deer-driving, in which it is essential that the hounds shall keep close to the deer, or that the latter shall be very much frightened. Stoucheige, it is true, considers that the staghound or rough greyhound, for we presume that it is of this animal that our correspondents write, possesses some enough to follow even a cold track. These dogs have been extensively used in both deer and antelope hunting in the West, but have not proved so useful in this sport as have the smooth greyhounds, which have more speed, though perhaps not so much strength. The old English staghound was essentially a larger foxhound, in respect to his head, and had a body like a bloodhound, but somewhat lighter. The English staghounds of the present day are merely a larger and lighter draft of the ordinary foxhound. Staghounds are frequently advertised in our columns, and our correspondent can, no doubt, obtain one either by advertising or watching our advertisers' cards.

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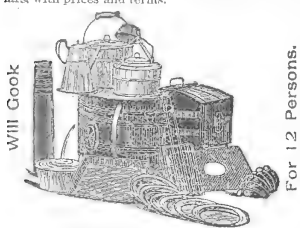
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Entries will be received for the open stakes up to mid-day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.

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Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

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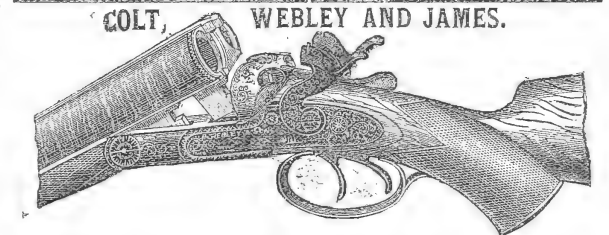
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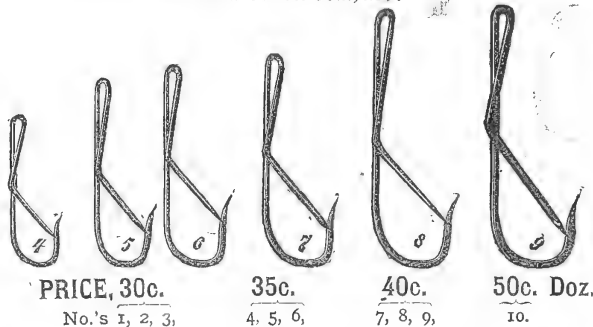
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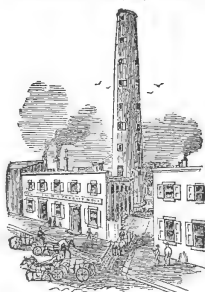
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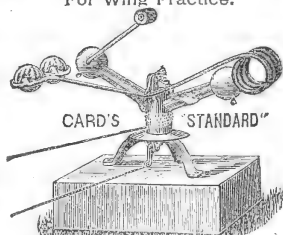
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ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

[Entered According to Act of Congress, in the year 1878, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington.]

Terms, \$4 a Year, 10 Cts. a Copy.
Six Mo's, \$2. Three Mo's, \$1.

NEW YORK, THURSDAY, OCTOBER 14, 1880.

Vol. 15—No. 11.
{Nos. 39 and 40 Park Row, New York.

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FOREST AND STREAM.

NEW YORK, THURSDAY, OCTOBER 14, 1880.

VELOCITY OF SHOT.—We promised some weeks ago the publication of the full text of Prof. Mayer's paper on the Velocity of Shot. We regret to state that, owing to the serious illness of Prof. Mayer, he has been unable to prepare the manuscript for our columns, but promises it to the readers of the *FOREST AND STREAM* as early as practicable. An imperfect synopsis of the article appeared, at the time it was read, in some of the daily papers, and has since been copied by some of our exchanges. We thought it due to Prof. Mayer and to our readers to publish the article, when we do publish it, complete and as its author would have it appear.

SPORTSMEN'S ASSOCIATIONS OF WESTERN PENNSYLVANIA.—The Sportsmen's Association of Western Pennsylvania has 300 members; in fact, 288 appeared at last roll call. The association is now ten years old, and still growing. It is composed mainly of business and professional men, who have done much to enforce the game laws. Their club room is 50 feet front by 80 feet deep, situated in the most populous part of Pittsburg. The first floor is divided into a reading room, library, card room and a large billiard room. The second story is called the assembly or meeting-room, and besides the numerous chairs and tables for officers and members, contains cases of rare specimens of birds shot by members of the Association, as well as a large variety of small birds purchased from a skillful taxidermist in Massachusetts, making in all about 3,000 good specimens. Their exhibit of animals and reptiles is quite small, and some of the boys had better go after snakes a little.

The Alleghany Sportsmen's Association of Alleghany county is a little over one year old, and has at least 100 members, with headquarters in Alleghany City.

A NEWSPAPER'S RESPONSIBILITIES.

AS newspapers are managed by individuals, they are no less liable to error than the latter. And, although employing the impersonal "we," their responsibilities to the public—to their readers and advertisers—are no less binding than are those of the individual business man. Moreover, because of their greater facilities for obtaining information, there are certain duties incumbent on the publishers of a newspaper from which commercial men are free. They must especially avoid advertising any article or implement that may be injurious to health or dangerous to life or limb. No concern can shirk the responsibility which will attach to it, if it knowingly advertises a dangerous gun or an unsafe pistol. Every one knows that a safe rifle cannot be made for \$5, and if persons represent that they are selling such a gun for that sum, this representation is *prima facie* evidence that the gun is not a proper arm to put into the hands of the shooting fraternity.

But a newspaper is not bound to furnish brains for its readers. It must exercise due care in receiving advertisements, and in this respect must protect itself and its patrons. It cannot, however, vouch for the honesty or business standing of all those who advertise goods for sale in its columns. Its readers, in treating with strangers who live at a distance, must be governed by the ordinary and generally accepted rules of business. A capitalist in Boston does not buy a mine from a Colorado prospector without taking some measures to see that the property in which he is to put his money is really what it is represented to be. Why should a sportsman in Texas buy a dog from a breeder in Maine without inquiring as to the responsibility and trustworthiness of the seller. Every man who shoots has his own ideas as to what a dog should do and be, and scarcely any two men think alike on this subject; moreover, as few men understand how to handle a dog, therefore an animal which will work well before a good handler may be worse than useless to another man, whose experience or knack is less. Years ago we laid down for ourselves a rule from which we have never deviated. It was simply this: never to buy a broken dog without ourselves giving it a fair trial. We are willing to pay the express charges both ways, and to deposit the price agreed on with some reliable party, preferably the Express Company. If at the end of the time agreed on the dog does not give satisfaction it is returned, and the only loss we have suffered is that of the charges.

We sometimes receive complaints from persons who have bought dogs through advertisements in our columns, which do not satisfy them. Such persons are often themselves to blame for the losses that they have incurred. They have not taken proper precautions to guard themselves against loss and bad treatment on the part of designing men. In these days of express companies no man need part with his money before he sees the goods which he is buying.

Another point to which attention must be called, is the offers which occasionally appear to give something of great value for little or nothing. It would scarcely appear necessary to warn intelligent men against offers of this kind, but certainly the "fools are not all dead yet," and each one who sends his money thinks that he will escape being swindled and that the rest of the community will come to grief. We have little charity for the people who are gulled by these transparent humbugs. They need a lesson of this kind. To all who are tempted in this way, we would say, however, beware of such traps; and if a man offers to sell a \$200 gun for \$20, don't buy it. There are philanthropists in the world, no doubt, but they have not yet been driven to advertising in the newspapers. They can find plenty of people on whom to bestow their favors without announcing it through the press. When the millennium day arrives, and some noble hearted sportsman desires to send to each bearer of the rod or gun, a \$35 split bamboo rod and equipments, a \$300 gun, a long-range rifle, and a thoroughly broken Faust-Keswick pointer, all for a three-cent stamp, we will agree that he shall have free advertising in *FOREST AND STREAM*, so that the sportsmen of America may all avail themselves of the opportunity offered.

In considering the advertisements offered us, we try to exclude all those which have anything about them which ap-

pears suspicious, but occasionally through misrepresentation or from some inadvertence advertisements may appear which should not have been admitted to our columns.

FOREST AND STREAM cannot answer or be responsible for casual advertisers in its columns or for those replying to such advertisements. We recommend our patrons, whether readers or advertisers, in doing business with strangers, to demand references, to have goods sent by express C. O. D., and in fact to protect themselves by all legitimate means. No one in these days expects a customer to buy goods, without inspecting them, and no one need feel aggrieved at having an intending purchaser use reasonable business precautions in business dealings. Of course with a majority of our advertisers such precautions are unnecessary. The statements of established houses which have a standing in the commercial world may be implicitly trusted.

"SEALED CANS."

THIRTY-FIVE years ago, Sir John Franklin, with a company of one hundred and thirty-five men, sailed from England to attempt a northwest passage to the Pacific Ocean.

No survivor of that party ever returned. The mystery surrounding the fate of the expedition has never been dispelled. In the melancholy interest with which the civilized world has not yet ceased to regard it, the Franklin expedition stands alone. It is the great tragedy of the North Land.

Attention has been newly called to the subject by the search expedition of Lieutenant Schwatka, who claims to have discovered in King William's Land relics of the Franklin expedition; and some of the cable dispatches received from England during the past weeks commenting upon these alleged discoveries are of the most startling and unexpected character.

Commander Cheyne, who was attached to one of the former search expeditions, charges that Franklin's men perished, not from Arctic exposure, but from starvation; in short, not to put too fine a point upon it, that they were murdered by the contractor who furnished the canned meats for the expedition. The cans labeled "mutton" and "beef" contained, it is alleged, nothing but bones and offal. And when the official inquest is held upon the skeleton of one of the Franklin party, which is now on its way to England, Commander Cheyne says that he will reiterate and prove his charges against this contractor.

This, it must be confessed, takes away all the poetry from the Franklin expedition. If these terrible charges of Commander Cheyne can be proven, or if there is ground for even a suspicion that they may be true, the sympathy of the world for the victims will straightway be turned into indignation against the contractor.

The moral of all this is of nearer application than the North Pole.

Every man who seals a tin can, affixing his own signature to assure its genuineness, and then, prompted by his accursed greed for gain, and knowing full well that the possible consequences of his deception may cost human life, deliberately affirms that that can contains one thing, when he knows it to contain another thing, assumes in so doing a tremendous and awful responsibility.

It matters little whether his deception accomplishes its disastrous result among the green fields sought for pleasure or amid the wastes of an Arctic land; it is of little moment whether the true nature of the contents of that can be discovered at once or five or thirty-five years afterward.

PISCO.—It was once the custom when public officers had proved unfaithful to their trust, to banish them from their native land; in these days a happier custom prevails, whereby a term of cheerless exile is made a stepping stone to advanced rank. The *FOREST AND STREAM* presents its best compliments to Commander L. A. Beardslee, late of the U. S. S. *Jamestown*, stationed at Sitka, Alaska, and now detached and on his way home to be examined for promotion.

Commander Beardslee's task at Sitka was one of some magnitude, the governing of a mixed population, made up of diverse nationalities and for the most part not accustomed to government of any kind. Something of the nature of this

work may be inferred from the following clipping which is taken from the *Oregonian*:

The military expedition under Major Morris and Capt. Beardslee, was about 15 days. They went as far as 59 deg. north lat., visiting all the principal Indian villages and holding audiences with the leading chiefs. They ascertained that three British canoes from Fort Simpson, fitted out by the Hudson Bay company, had been to the sea over grounds in Alaskan waters; that a few other had been taken. These canoes escaped by an inside channel; otherwise Major Morris would have captured the outfit. The Hoonahs are much excited over this circumstance, and are ready for war in the event of their coming again. It is reported, and with good foundation, that during the latter part of this month a fleet of sixty canoes, manned by King George Indians, will leave Fort Simpson for Cross Sound to hunt the sea otter. If this is persisted in war and bloodshed will be the result, for the Hoonahs, Chilkats and other tribes, who hunt these animals, are resolved to protect these grounds, cost what it will.

The situation is a very grave one. The United States has no vessel in Alaska which can prevent these incursions. The expedition of the *Favoside* was highly successful. The Indian tribes were taught by Capt. Beardslee what they must expect if they made war upon or kill white men. Major Morris instructed them in the customs laws and forbade their smuggling. The Indians are now trading principally at home instead of going to Fort Simpson. Important hydrographic work was done by Master G. P. Hains, United States Navy. A large bay, heretofore uncharted, was discovered north of Icy Straits, smitten rocks located, islands discovered, reefs surveyed, and other useful work done.

On giving up command of Jamestown and the charge of Alaskan affairs the returning commander received the rare compliment of being rowed to shore by commissioned officers who volunteered, and he left the ship under a salute of three cheers which were followed up by the steamer drew off by the raucous from the whole town assembled on its wharf to see him off.

Aside from his official duties, as his *FOREST AND STREAM* friends know, "Pisco" has found time to pursue his natural history studies, and to amass a great fund of information about the country and its inhabitants. Some of this has already been published in our columns, and we have now on hand a series of letters which surpass in interest even those already printed. Considering only the interests of our subscribers, we are quite delighted that Uncle Sam did not leave our correspondent in his cheerless abode of snow another winter, but for his own sake we may rejoice that "Pisco's" letters will hereafter come to us from a sunnier clime.

NEW YORK PROTECTORS.—The fact that our remarks in a recent issue relative to the selection of the new game and fish protectors have been widely copied and echoed by the press is a sufficient proof that the criticisms made were well grounded.

THE FISH COMMISSION.

THE summer work of the U. S. Fish Commission at New Port is finished, and Prof. Baird and his staff have gone to Washington to work up the material obtained. It has been a most profitable season, both for science and to the fishery interests, not only of Rhode Island, but also to the Atlantic coast; for while the former will rejoice over new forms of fishes, mollusks and crustaceans added to the fauna, the fisherman will obtain a deeper insight into the habits, food and migrations of his prey, which will enable him to seek it more intelligently and with greater success. The Fish Hawk will shortly leave for Wilmington and Washington, but it is not yet decided whether she will remain at these places all winter, or be sent to more southern waters to investigate and explore the fisheries and their many interests.

The work on the Pacific coast has progressed favorably, and a correspondent writing from there says:

One of the best points about the United States salmon-breeding station on the McCloud River is the economy with which it has been carried on. It has now been eight years in operation—this is the ninth—and has turned out over 50,000,000 salmon eggs, and the entire expense for the eight years to the United States, including the salaries of all connected with it, has been less than \$70,000. For this sum of money the establishment—the largest of its kind in the world—has been put in perfect order and run eight years. Two salmon hatching-houses have been built, and three dwelling-houses, besides numerous smaller buildings, have been erected. Out of this sum of money the Deputy Commissioner's yearly salary and traveling expenses for eight years, besides all the other salaries and other expenses for the same length of time, have been paid; over 50,000,000 eggs have been taken and matured; a very large portion of the expense of the shipping of the eggs has been paid, and a large trout-hatching house has been erected and put in running order. Salmon eggs were sold to the Eastern States, just before the McCloud station was started, at \$45 a thousand. This was the regular price. At this price the 50,000,000 salmon eggs turned out from the United States fishery would come to the enormous sum of \$2,225,000. These eggs have all been produced and a large number of them shipped East, and all the buildings and apparatus paid for, at an entire cost of less than \$70,000. The net gain to the United States by the operations of this station, during the salmon eggs at the old prices of 1890 to 1897, has been \$2,155,000, or forty-nine-fiftieths of the former cost of the same number of salmon eggs. It is doubtful if the United States Treasury record can show another instance where so much has been accomplished for so little money.

Of the investigations in connection with the census, under the direction of Prof. Goode, it is too early to speak, but it is gratifying to note that the press throughout the country appreciate the labors of the Commission, and in this connection we print the following editorial from the *New York Herald*:

At a time when newspapers and human heads are full of politics, the announcement that the Fish Commission has ended its summer

labors is hardly likely to cause a ripple of excitement, yet the truth is that the commission has done the country more real service within the summer than any half dozen prominent politicians combined. The head of this branch of the public service, with several of his assistants, has been steadily at work for several years in studying the habits of various fishes that are of great commercial value, yet from one reason or another disappeared from our coasts, and the results, accomplished with so little blowing of trumpets that not one person in a thousand has heard of them, have not only been the restoring of many of our rivers with shade and some of them with salmon, but have given abundant grounds for believing that the sea bass and the cod, once plentiful off our coast, but now very scarce, are likely to be with us again in great numbers. To the Fish Commission the country owes the information that our Southern coasts have fisheries—those for the mullet—that are likely to rival in importance any of the Northern "catches." The commercial importance of our fisheries is greatly underrated; even the announcement of the immense price we paid Great Britain for the privilege of fishing for a few years in Canadian waters has not brought the people to a realization of the value of the "harvest of the sea." Like all other natural products the fisheries depend largely upon the intelligence of the fishermen. The sea crop may be exhausted by bad management as easily as any land crop. A few years ago the salmon fisheries of the Columbia River, in Oregon, seemed inexhaustible; two years ago the Oregon Legislature was frightened into an attempt to so regulate the season's work that the supply should not be exhausted; the depletion of the rivers in older States is a matter of long record. To prevent loss and to gain so much at a cost so little as the Fish Commission occasions is cause for congratulation.

BARNUM AS A FISH CULTURIST.—At the recent fair of the Suffolk County, N. Y., Agricultural Society, Mr. P. T. Barnum, the well-known showman, spoke to the people on agriculture and kindred subjects at the court-house at Riverhead, Long Island. Mr. Barnum said that he came more to hear what Messrs. Roosevelt and Blackford, of the New York Fish Commission, had to say upon fish culture, than to say anything himself, as he had seen them advertised to address the people upon that important subject, and he regretted that they were unable to be present, as he wished to learn what was done and how to do it; but as there was no prospect of having any fish-talk, he would give his experience in this direction, which he did as follows:

"I had a nice pond on my farm full of pickerel, sunfish and other worthless species, and everybody advised me to kill them off and stock it with black bass; so I got men with seines, and dragged out all the pickerel, and put in two hundred fine black bass and left them alone for two years. A friend one day said, 'Barnum, there are some other fish in that pond yet, and they may eat up all the young bass. I saw one there the other day a foot long.' So, as he knew all about this sort of thing, I let him manage it, and he caught quite a lot of them. I forgot what he called them, but as they were very destructive to bass and first-rate for the table, he fished away, and sent me some occasionally, until he reported the last lot as being all that was left of them. As they were going to the cook, a friend arrived, to whom I showed them and told the story, 'You big fool,' said he, 'those are your black bass!' And it was a fact; he had caught and we had eaten the whole lot, and I came here to-night to learn how I might keep fish and eat them at the same time."

JUSTICE TO DOG-KILLERS.—We publish elsewhere from a Virginia correspondent, whose pseudonym will be recognized with pleasure, the story of how a dog-poisoner met his deserts. The story is literally true, and is of service as establishing the points shown. It seems to be very generally believed, even by very intelligent people, that there is no remedy in law against the malicious or wanton killing of a dog, on the idea that a dog is not property. A dog is not property in this—that a man cannot be convicted at common law of larceny of a dog owing to the peculiar nature and habits of the animal. But the courts in Virginia have in several instances decided that his owner can recover damages for the wanton and malicious killing of his dog. This opinion being so prevalent the story may be of service to sportsmen in other States where the common law of England is the rule, as it is in Virginia, in bringing to justice and punishing that class of people who are not willing to respect the rights of their neighbors without the fear of the law to restrain them.

SIZE OF BLACK BASS.—We have on several occasions expressed a doubt about the small mouth black bass exceeding the weight of four pounds. It is true we often had accounts of larger ones from correspondents whose veracity we had no reason to doubt, but then our skepticism was transferred from the size of the fish to the ichthyological knowledge of our informant, as the big mouth often inhabits the same water, and is so very often confounded with it. All doubts are now set at rest by Dr. E. Sterling, of Cleveland, Ohio, who sends us a photograph of one caught at Long Point Reef, Kelly's Island, Lake Erie, on Oct. 16, 1890, which weighed six and a quarter pounds! The picture shows the fish to be remarkably stout, as though full of eggs or gorged with fish, its depth being contained in its length nearly three times, and the question may arise whether or not it is fair to record the weight of a fish when so filled. The season in which it was caught is not the ordinary spawning time for this fish, but specimens have been found full of eggs at fully as late a period. Even allowing a half a pound for these extras, there still remains enough to give it precedence over any *Micropterus salmoides* which we now remember as being upon record.

Dr. Sterling has also sent us photos of Lake Erie catfish, to which we will refer again; the pike-perch or wall-eyed pike, and of the "lake mullet" (*Myxodon otocentrus*), all from plaster casts made by himself.

THE SAW-DUST ARENA.—The next six-days' walk will begin in London, Nov. 1. Several English competitors will walk, and America will be represented by three men, one of whom is a negro. In accordance with the preconceived plans of "the management," one of these Americans will win, and the Astley belt will come to America. By regularly alternating the victories, the sagacious backers of these hippodromes are successful in maintaining for their contests enough of the "international" character to attract the entry fees and betting stakes of the great unwashed. We could wish that the managers would find it to their interest this time to let the belt remain in England. That would be a consummation devoutly to be wished for by all decent men.

The Sportsman Tourist.

HUNTING IN MONTANA.

A chill, and ending of a dreary day.
The waning light in stillness dies away;
Bequeaths no ray of hope the void to fill,
But leads to gloomy thoughts more sadness still.

SUCH were my thoughts as I crouched among the reeds and rushes of a little slough, one day last March. It was cold, cloudy; and I had been there all day watching for waterfowl with little success, as my bag up to that time was only two geese and five mallards. As I repeated the lines to myself I was preparing to return home, when I heard the familiar and pulse-quaking "hook!" of a flock of geese, and presently saw them coming straight toward the slough. I did not allow them to come, but just as they were about to, I let both barrels of my No. 10 Wadley into them, and dropped three. Before I had time to gather them up, along came some mallards, and I got five of those. Then came a tremendous large flock of little teal, and changing my course shot for a couple of charges of No. 8, I dropped nine of them. Then a pair of geese, brant and mallards charged at me, and were coupled with a dose of four of their number. In fact, I was kept busy loading and firing till dark, my last bird being a fine large swan, which I dropped with a charge of BB. So my day's sport ended finely after all, and next morning I sent the wagon up for the game, and found I had killed thirteen geese, eight brant, seventeen mallards, thirteen teal, five ducks, which I do not know the name of, and one swan, making a total of fifty-seven head, which I call a pretty bag for two and one-half to three hours shooting.

But waterfowl is not the only game here by any means. Antelope can be seen any day by riding three or four miles from the house. At this time of the year they are not banded together in large numbers as they are in the fall and winter, and are exceedingly hard to approach. I was scouring about on the prairie the other day with an Indian, and we ran over a little band as we turned the point of a ridge. The Indian jumped off his horse and killed four before they could get out of range of his Winchester. I never cured to hunt antelope—in fact, could never find any sport in it; and to me the meat has a very strong, disagreeable taste.

The timbered bottoms of the river—the Marias—are full of white-tail deer, and the "cooleys," which run out in the prairie, shelter a fair sprinkling of black-tail, sometimes called mule deer. It is with the former, however, that I have the most sport. I have an old Indian mare which I ride when hunting them, and I am sure she enjoys the sport as much as I do, for she will poke along through the brush, keeping a sharp lookout, and when she sees one she will stop of her own accord. I remember one day I was hunting with her in the bottom below here, and when passing through a little thicket of cherry and bullberry brush, she stopped all of a sudden, and although I pressed my spur against her side she would not move an inch. Well, I looked and looked, and saw nothing, and she would not give the least sign of moving, thinking she had fooled me, when about thirty feet to my left I saw a little fawn standing staring at me. I immediately gave it my compliments in the shape of nine large buckshot. Another time I scared up a doe and two fawns, dropping the doe and one fawn with a right and left, while the other ran off a little way and stopped. Slipping off my horse, I crept up within range, and killed him also, making three deer in about an hour and a half. I always use a shotgun to hunt them, and seldom fail to get a close, fair shot, although I often miss; but, like all hunters, I do not care to tell about the misses.

Of all foolish animals that walk on four feet I think the black-tail deer the most foolish; unless the wind is in their favor, a person can nearly walk over them. I have heard them sit of standing in one place and killing a whole band. In fact, when we were "out to buffalo" last winter I saw an Indian clean up a band of seven, shooting from one position. They prefer to stay in a broken, hilly country, where are great high-cut banks and deep cooleys. There is such a place about five miles from here, and I often go out there for a little sport. I killed a buck there one day which I think would have weighed, dressed, over 225 pounds. He had a very large pair of antlers, but, like all black-tail, they were irregular and devoid of beauty.

About thirty miles from here, looming up in all their grandeur, are the snow-capped peaks of the Rocky Mountains. There can be found, mingling with one another, every species of game there is on the North American continent—Mountain buffalo, moose, elk, deer, bighorn and Kooky Mountain sheep; grizzly, cinnamon and black bear; panthers, wolves, lynx, swans, geese, brant, ducks, prairie chickens, grouse, etc., enough to satisfy the wildest dreams of any sportsman.

Then the streams are full of trout, and the larger and deeper lakes have plenty of salmon in them, especially St. Mary's Lake, where it is said salmon have been caught weighing fifty pounds. After the rainy season I intend going up to Chief Mountain and St. Mary's Lake on a hunting expedition. As it is impossible to get among the game with a wagon I shall take an Indian along named Enuck-yu. He is an A. No. 1 Indian; has a large new lodge, plenty of horses to pack the plunder; and last, but not less, three strong young women to do all the work. The expenses of the trip would be nothing, and good saddle horses can be bought for \$20.

Alas! the skeletons which cover the prairie are all we have left to remind us that thousands of buffalo used to roam about here. But I am happy to say that I have killed a few of them before they become extinct. This winter I was over in the Judith Basin for several months with the notorious Indian trader Jon Kipp, who was trading for robes and pelts with the different tribes of the Blackfoot Nation—Piegans, Bloods and Blackfeet. The average cost of a good robe was about \$1.75, and as he traded for about 2,000 robes, he will clear between six and seven thousand dollars.

The buffalo were about thirty miles from the Post, and as I had no other way of going I accompanied a camp of Piegiens, as like an Indian, slept like an Indian, and found it not very hard living after all. I had heard a great many stories about running buffalo, how dangerous it was, etc., etc.; but when we had arrived on the ground, and one fine morning started out for a run, immediately I saw the buffalo I forgot all about the danger, and was as eager as any one to be in the lead. Seeing a little band running off to the right I let the impatient horse go, and was soon pumping cartridges into them with my Winchester carbine as fast as possible, and at the end of the run found I had slain seven. But instead of being as happy as I felt like the Indians, my buffalo were of nearly every age and sex. What darning and feasting there was in camp that night! The amount of liver and entrails there was roasted and eaten was astonishing, and it was kept up every night till we started back to the Judith.

The Indians and whites in this country are all armed with the Winchester gun, the Indians mostly using the '66 model carbine, and the whites the '66 or '73 model rifle. Any other kind of gun is seldom seen, there being no sale for them in the country. An attempt was made in Fort Benton last summer to introduce the Burgess gun, but three or four of them burst, and one man had his arm shattered, and to-day they could not be given away.

In your issue of March 11 I notice an article on the "Unfrequented Regions of the Adirondacks" by Albert Cornish, in which he says: "The first week I was there I heard a catamount scream regularly every morning about 3 o'clock." Now, I would like very much to know what kind of a noise the animal made. I spent nearly the entire winter of '77 and '78 in Brown's tract, Hamilton and Herkimer counties, N. Y. I was with the well known hunter, John J. Wakes, and more game than any other part of the Adirondacks was placed at my disposal with fair success, killing three full grown ones, the largest of which measured over eight feet in length. My companions were Mr. Jack Sheppard and Ed. Arnold, whom all your readers know who have visited Brown's tract.

These men, Sheppard and Arnold, have been panther hunters from boyhood, and their scores of killed will reach pretty near a hundred. They solemnly assert that in their whole experience with the "varmint" they have never heard such a scream or make any noise whatever unless they were wounded, and by experience I can affirm that when the latter is the case they can growl here enough to cause a person to lose his hat, lock his snow shoes together, and fall over in entire disregard of a cocked rifle which, but a second before, he was pointing at the beast. Yes, I am very anxious to hear what kind of a noise the animal made, and if Mr. Cornish will enlighten us he will greatly oblige.

AP-WA-CUN RA.

PROVING A DOG-POISONER'S GOOD CHARACTER.

ABOUT the latter part of August, in the early part of the last decade, the writer and eight or ten friends went on a deer hunt in Rockledge County, Virginia, near Goshen, on the Clinchfield and Ohio Railroad. The deer were placed at different points on the Calf Pasture River, opposite the lower ridges leading to the top of the mountains, down which the deer came to water after being run by the dogs. The driver started in the mountain with the dogs about sunrise, and I had waited at my post until eleven o'clock without hearing or seeing anything that indicated the approach of a deer. I was standing immediately upon the bank of the river—one of those humid mountain streams so clear that you can see the smallest experience with the "varmint" were placed at my disposal with fair success, killing three full grown ones, the largest of which measured over eight feet in length. My companions were Mr. Jack Sheppard and Ed. Arnold, whom all your readers know who have visited Brown's tract.

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Before he left, however, I said to him: "Mr. Mohler, it is not safe to leave your dog here. I understand there is an old man, a still-hunter, just across the river here, who is in the habit of poisoning dogs, and you had better take him with you."

He replied that he hardly reckoned he would undertake to do such a thing right before our eyes, and rode off.

He was scarcely out of sight when this very old man and a son appeared, guns in hand, and stood around the deer, talking of the long chase, the splendid dog, etc., complimenting me at the same time on the shot. I had made with the rifle (which had cut the right horn clear off about half an inch from the skull), and then turned their attention again to the dog who was lying in the gap close by. After a little while I saw the old fellow—Davis by name—quietly pull his hand

out of his breeches pocket, and, as a boy shoots a marble, shot something like a chunk of dried beef from his fist into the gap, right at the nose of the dog. As he did so he turned to his son, made some remark about going back to the house, and started rapidly away, followed by the boy. The instant I saw the motion made by him in giving the dog the object, whatever it was that he had in his hand, I made a spring at the dog, but found I was too late to intercept him. He had gotten whatever it was and had swallowed it. I instantly informed my companion of what had happened, and remarked to him, "That's a dead dog!"

About this time we heard our dogs running in the mountain, and I hastened back to my stand, charging my friend to keep right by the dog, which he promised to do. In about half an hour I heard the dog whining and making a good deal of noise, and knowing that as long as he did so there was no chance of deer coming to either of us, I hastened down to where the dog was. Just as I reached him he turned over on his back and had a severe spasm which lasted a minute or two. I instantly recognized the unmistakable signs of strychnine; then another and another spasm followed, and in ten minutes he was dead as a door nail. He had hardly given his last gasp when his owner appeared, and I told him what had happened and what I had seen old Davis do.

I never saw a man so crazy with anger in all my life; he vowed he would go to Davis' house and kill him, but after much persuasion he was induced to listen to reason, and said he would do whatever I advised. Whereupon I advised him to go to his camp and get one of his lawyer friends (there being several of that profession in his party, Governor Letcher among them) to bring suit against Davis for this wanton killing of his dog; and we all promised him that cost what it would, we would attend the trial and give our evidence against him. Davis was notoriously stingy, although a man of good property, and I thought a verdict, with a large amount of costs which the suit would necessarily entail, would hurt him worse than any corporal punishment that could be inflicted. Mohler did not seem altogether satisfied with this, because, like a great many others, he did not believe that a civil action would lie against a party for the wrong of killing a dog. Upon reaching the camp, however, his lawyer friends told him that they could maintain such a suit, and promised to bring the suit and prosecute it vigorously without charge.

As soon as they returned to Lexington, Governor Letcher took the matter in hand, and brought the suit, and a great many very sensible people thought that nothing could be recovered. At the first term of the Court I was absent and the case was continued, and so for several terms, until the costs attending the suit (the other witnesses, some twelve or fifteen, having come a long way every time) had piled up above a hundred dollars. At last I attended the court and the trial began.

All the evidence for the plaintiff, Mohler, was heard, Governor Letcher and other distinguished counsel appearing for him. The courtroom was crowded with spectators eager to hear this singular case. After resting the case for the plaintiff the defendant, Davis, was put upon the stand, and denied the whole thing, and swore that he never poisoned the dog in question nor any other dog in his life. Then his counsel, Colonel Moore, called the next witness, Mr. Wilson, one of the most intelligent and influential farmers in the county, who was a near neighbor to Davis. His examination was about this:

Counsel for Davis: "Mr. Wilson, tell the jury how long you have known Mr. Davis, your opportunities of knowing him, and what sort of reputation he bears among his neighbors as a citizen, neighbor, etc."

Witness: "Have known him thirty or forty years; live very near him. Mr. Davis is a good citizen, and a kind, hospitable neighbor; stands very fair in the community in all his business relations, etc."

Col. Moore's countenance beamed with satisfaction, he looked defiantly at Governor Letcher and complacently at the jury. The Governor raised his spectacles and looked very blandly at the witness:

"Mr. Wilson, do you know Mr. Davis' reputation in your neighborhood as a dog killer? If so, please tell the jury what that reputation is."

Here a little wrangling took place between counsel about the propriety of the question, but the Court permitted it.

Mr. Wilson answered: "Well, sir, I think I know Mr. Davis' reputation in that respect."

"Well, sir," said the Governor, impetuously, "what is it?" Witness, reluctantly but distinctly: "Mr. Davis, sir, has the reputation of having killed and poisoned more dogs than any man in Virginia."

"Take your seat, Mr. Wilson!" and the Governor turned round with the most withering look at the Colonel: "Any more character witnesses, Colonel? If you have, trot 'em out!"

A hasty consultation between the Colonel and his client followed, during which the audience indulged in a hearty laugh at their expense. Presently another witness was called, whose name I do not now remember, and the same questions were propounded to him, with the same answers. After three or four had been examined, with the same results as Mr. Wilson's testimony, the Colonel announced that he was "through," to which the Governor laconically replied, "I would suppose you were." The case was given to the jury after short argument, in which Governor Letcher produced the most convincing authority that the law of Virginia protected a person in the enjoyment of his property in a dog as well as any other species of property, and the Court so instructed the jury. In a few minutes after retiring the jury brought in a verdict of \$15 damages to the plaintiff for the dog, which carried with it the costs—by this time swelled to a considerable sum by the frequent postponements and the distance which had been repeatedly traveled by the numerous witnesses, all of whom claimed their mileage and attendance every day.

This ended this case *celibae* by which the doctrine, that the law of Virginia will protect the owner of a valuable dog from the malice and meanness of dog-slayers, was freely announced and publicly vindicated by our Court. The only cause of complaint we had was inadequacy of the damages allowed by the jury for the dog. He was one of the handsomest specimens of the fox hound I ever beheld, and had run that deer from five o'clock until after eleven, on a hot August day, over the roughest of mountains, and was in sight of him when he was shot.

It is hardly necessary to say that this little lesson cured Mr. Davis of his propensity to kill hounds. From that day to the day of his death, which occurred a year or two ago, he not only never killed another dog, but used to show the hunters, who went to the neighborhood to drive deer, the most marked politeness and civility and joined in the chase with all who would let him, every time making public renunciation of his nefarious practices.

Davis' favorite mode of operating on dogs was to— But I ought not to tell this; for old dog poisoners ought not to be taught new tricks. JACQ.

Staunton, Va.

Natural History.

THE FOOD OF THE DARTERS.

PROF. S. A. FORBES, who has been doing such good work on the food of birds and fishes of Illinois, has been investigating the gastronomic tastes of those little fishes of the family *Ethostomidae*, or "darters," which are found in most all small streams, and attract attention from the most casual observer by their singular mode of progression on the bottom, and which gives them their popular names of "Johnny darter," "sand darter," etc. Prof. Forbes publishes his observations in the *American Naturalist* for October, and begins by saying:

"What the humming-birds are in our avifauna, the 'darters' are among our fresh-water fishes. Minute, agile, beautiful, delighting in the clear, swift waters of rocky streams, no group of fishes is more interesting to the collector; and in the present state of their classification, none will better repay his study. Notwithstanding their trivial size, they do not seem to be *drumfish* so much as *concentrated* fishes—each carrying in its little body all the activity, spirit, grace, complexity of detail and perfection of finish to be found in a perch or a 'wall-eye pike.'"

His observations were based upon a study of the contents of seventy stomachs, which represented fifteen species, collected in all parts of the State, in several months of four successive years, which he considers to fairly exhibit the food of the whole family at different seasons in twenty-nine localities, as the different individuals, taken at the same date and locality, agreed so closely in their food that the study of two is five gave all the facts obtainable from more fishes. The "sand darter" (*Percodopsis*) is comparatively rare in Illinois, as there are few sandy streams. Seven stomachs were remarkably uniform, containing only the larva of small diptera and Ephemeroidea, eighty-one per cent. of all being larva of Chironomus, a gnat-like insect, twelve per cent. larva of other diptera, and seven per cent. of May-flies.

Twelve specimens of the genus *Aleoridius** exhibited

*The classification used is that of the second edition of Jordan's "Manual of the Vertebrates."

seventy-five per cent. of May-flies, and the remainder was larva of dragon-flies and Chironomus; while twelve specimens of the genus *Desmognathus* varied only the appearance of fifteen per cent. of cases, or caddis worms (larva of *Phryganetidae*). Other genera differed but little, perhaps with the season, until we came to *Percina coprodes*, which showed a preference for a crustacean diet by containing "thirty per cent. of Entomostraca and three per cent. the smallest of our Amphipoda, *Allochroetes dentata* (Smith), Faxon. Most of the Entomostraca were *Cladocera*, including *Daphnia*, *Eucercerus* and *Daphnia*.

Here occurred the only instance of molluscan food in the group. One specimen had taken a few individuals of *Anodonta imbecilis*, Say. Reduced ratios of Chironomus and Ephemeroidea larvae, and a few *Corixa tenuis* complete the list.

Last and least comes *Microperca punctulata*, represented by nine specimens from four localities in Northern Illinois. This smallest of the darters shares with *Percina*, the largest, the peculiarity of crustacean food, which made up sixty-four per cent. of the total. The principal kinds were *Cyclops*, *Chydorus*, young *Gammarus fasciatus*, Say, and young *Crangonopsis gracilis*, Smith. The remaining elements were Chironomus larvae (thirty-four per cent.) and a trace of Ephemeroidea (two per cent.).

"It will be seen that the family, taken as a whole, divides into two sections, distinguished by the presence or absence of crustacean food. This is easily explained by the fact that *Percina* and *Microperca* range much more freely than the other genera—being frequently found among weeds and Algae in comparatively slow water with muddy bottom, while the others are rather closely confined to swift and rocky shallows."

Prof. Forbes plainly shows how these small fishes are only fitted to dwell in the smaller streams by keeping down their size, while, at the same time, they are by their habits able to hide from enemies under stones, and live in a current so strong as to require great muscular power to stem it, but which they avoid by bugging the bottom in the neighborhood of sheltering stones, and he concludes by saying:

"Perhaps we may, without violence, call these the mountaineers among fishes. Forced from the populous and fertile valleys of the river beds and lake bottoms, they have taken refuge from their enemies in the rocky highlands where the free waters play in ceaseless torrents, and there they have weeded from their sublimity nature's more prolific life. Although diminished in size by their continual struggle with the elements, they have developed an activity and hardihood, a vigor of life and glow of high color almost unknown among the easier lives of the low lands."

ONTOLOGICAL WORK IN THE WEST INDIES.—A new bird is reported from Mr. F. A. Ober's recent collections in the Lesser Antilles, making the twenty-second new species obtained by him from that region. It will be described shortly by Mr. G. N. Lawrence, who has identified and described all the new birds of former collections. It is a species of *Icterus*, and has been (provisionally, at least) named in honor of its discoverer, the *Icterus Oberi*. Besides this new species there are among the specimens many rare and unlooked-for species. The notes relating to them will probably be published (as heretofore) in the "Proceedings of the National Museum." The types of all the new birds discovered by Mr. Ober are in

the Smithsonian Museum, and likewise a full series from each island of the Caribbean chain of the Antilles.

With the material now on hand, Mr. Ober has at last accomplished the object of his three-years' labor, and is enabled to fill a gap which has until now existed in our ornithological knowledge of the West Indies. Maynard's "Birds of Florida," Cary's "Birds of the Bahamas," and Mr. Ober's notes on the birds of the Lesser Antilles, constitute valuable additions to our exact knowledge of avifauna of the South, extending over twenty degrees of latitude.

It is a matter of congratulation that the United States has received the benefit of the explorations of these young naturalists, especially as most of them have been carried on in islands owned by other nations.

English naturalists have noticed this, and, while regretting the fact that their own collectors had not availed themselves of these rich fields, have given our American workers their full meed of credit.

BURRS AND BURRS.

THAT one is never too old to learn is a saying as trite as it is ancient, yet every now and then one's experience some occurrence will bring the truth of this aphorism before our minds as strikingly as if it were a new idea. Especially is this the case when we find, as sometimes happens, that we have for years, perhaps from childhood, attached a wrong meaning to some very common word. The shock which a man feels when by some accident his blunder is revealed to him, is a severe one; and the thoughtful person is by such an occurrence taught more than ever to distrust his own ideas of things, unless they are founded on an absolute knowledge of facts, and to guard himself against expressing too decided opinions. Such reflections as these are apt to occur to a man after he has been wronged in a controversy, because one of his premises was wrong, or when he has written a telling essay which was to reform the world and demolish his adversaries, but in which his facts were not facts at all but assumptions. We should none of us be unwilling to acknowledge our ignorance. No one man can know it all.

We feel bound to confess that our ideas as to what constitutes the burr of a deer's horn have been apparently all wrong. In a recent article in the columns of a contemporary author, speaking of a discovery by Prof. Cope in relation to the burr on the horns of certain Pliocene deer, marks the word burr with an asterisk, and adds as a foot-note the following truly luminous sentences:—"Burr or burr stone"—A nearly pure siliceous rock, in which calcareous and other matters, originally forming part of it has (*sic*) been parted with and become replaced by silica, so that the casts of fossils are perfectly preserved in it. See Ruschenberger's Natural History Vol. II, p. 29, of Glossary."

The information thus conveyed while most interesting to the non-scientific reader will impress itself no less on the paleontologist who learns now for the first time that the antlers of the deer of the Pliocene were ornamented with "nearly pure siliceous rocks in which calcareous and other matters originally forming part of it, has been parted with, and become replaced by silica, so that the casts of fossils are perfectly preserved in it." Just fancy how odd the deer must have looked with these great bumps of rock on their horns, though perhaps, after all, the lumps may not have been large.

Ruschenberger's Natural History does not tell us that. And how strong the animals' necks must have been to have supported this great weight; what an enormous development of the *ligamentum nucha* must have taken place to support this weight, as well as of the other muscles of the neck. We can fancy that the Pliocene man, if with Prof. Whitney we accept his existence, must have had a decidedly exciting time in an encounter with a wounded deer whose antlers were thus furnished. What chance would the man of to-day have if a carload of rocks were hurled at him, each individual stone moving at the rate of a charging deer. How would any of our readers like to withstand the charge of a deer with a millstone about his neck? No doubt when the supposed Pliocene man did succeed in killing a deer, whose horns were adorned with this "pure siliceous rock" he carefully preserved the head, and taking it home had it mounted by a good taxidermist, and then hung it in his hall or dining-room, and the "cast of fossils perfectly preserved in the nearly pure siliceous rock" unquestionably added greatly to its beauty.

When the Pliocene man had friends to dine with him, he no doubt called their attention to these points in the horns, and told the story of the hunt, with great eloquence, but with becoming modesty. We had a vague idea that the antlers of the living *Cervidae* were furnished with burrs, but we presume that we were wrong. At all events, although we have killed in our day a good many deer and elk, we have never found one in which there was to be seen anywhere on the antlers any "nearly pure siliceous rock, in which calcareous and other matters has (*sic*) been parted with and become replaced by silica, so that the casts of fossils are perfectly preserved in it."

Truly We live and learn.

A YOUNG GUINEA FOWL.—A correspondent, "H. II. C.," of Bristol, Conn., sends us for identification a "quail" shot near that place by Mr. Everett Horton. There were six of the birds together, and they were feeding with a flock of chickens. When they flew up one was shot, but Mr. H., thinking that they were young turkeys, refused to shoot any more of them, not knowing what they were. The one sent us, which is little less in size than a quail, is a young guinea fowl.

JOHN KRIDER'S COLLECTION. —During a late visit to Philadelphia, we stopped in to see our veteran friend, John Krider, corner Second and Walnut streets, and were shown his grand collection of birdskins and eggs. Without attempting to enumerate their great number, and what he has, we may state that he has 720 to 750 varieties of skins and eggs, ranging from the eagle, hawk, owl, woodpeckers, warblers, flycatchers, shrikes, buntings to water birds, both vaders and ducks, and a complete assortment of game birds. Truly his collection is an interesting one. We found Uncle John in the midst of arsenic, scalped in hand and a beautiful woodcock before him which he was skinning. Our old friend has written and published a little work entitled "Forty Years Notes of a Field Ornithologist," in which he gives a brief sketch of every bird he has himself shot and whose eggs he has collected.

MORE QUAIL BRED IN CONFINEMENT.—*Catskill, September 27.*—*Editor Forest and Stream.*—Some two years ago I brought from the West quite a number of quail, and in the spring I turned out all but two pairs. The two hens which I kept laid over fifty eggs, which I set under bantam hens, and forty-five hatched out. I had them all in a yard, but one day I took them into the kitchen, and the door being left open I lost most of them. After I took the eggs from the quail one of the hens had hatched out twelve fine young ones. Last spring one of the boards got off from the coop and I lost all of them, old and young. I had left fifteen eggs, and these I set under a little hen, and eight hatched out. They were very fine strong birds, and were nearly grown, when one night the rats got in and killed them all. I leave for the West soon, will bring more quail home with me, and will try once more. I think I can raise them without any trouble.

B. F. CONKLIN.

POINTS IN THE ANATOMY OF SNAKES.—In a recent lecture upon "Snakes," by Prof. Huxley, at the London Institute, the speaker called attention to some peculiar arrangements in anatomical construction and jaw-bones, in illustration of the fact that the snake cannot be properly said to swallow its food, but seizes hold of it, gradually working it down its throat at its leisure. For this purpose a fully developed and effective saliva apparatus is required. The poison bag of the venomous snakes is nothing but a modification of the salivary glands of the harmless reptiles. There are instances in which they are almost identical. Another instance of the close relationship was shown in the fact that the sharp channel needle by which the poison is conveyed is nothing more than a development of the tooth which dangerous reptiles possess in common with harmless ones. The fact that the salivary gland was the poison receptacle of venomous snakes and animals affected with rabies appeared to Prof. Huxley to point out the direction wherein lies the solution of the problem of snake poisoning and a possible antidote against it.

SOME HABITS OF THE SEAL.—The following extract, taken from one of the letters of the New York *Herald's* Arctic Correspondent, conveys some novel information in regard to the habits of the seal:

The female seal in the early spring builds a habitation in the snow over and around the hole through which it breathes, and here its young are born and live until old enough to venture into the water. This house is called an ogloo, and is constructed very much like an Esquimaux igloo in shape, though it is more irregular and less ramified. The ogloos extend to neighboring holes. These ogloos are found with the assistance of dogs, as previously described, or by prodding with a seal spear the hillocks of snow that look like seals' houses. When a hunter finds an ogloo during the season that the young seals are living in them he immediately breaks in the roof with his heel in search of the little one, which usually remains very quiet even when the hunter looks down and pokes his head through the broken roof. The young seal is then easily killed with the spear and dragged out on the ice, and the hunter waits for the mother, which is never absent a long time from its baby. The young seal is generally cut open as soon as killed and its little stomach examined for milk, which is esteemed a great luxury by the Esquimaux. When young the seal is covered with a long white hair, very much like coarse wool. This skin was at one time very much used in making clothing, but lately has not been much in vogue among the natives, though occasionally coats and trousers of this material may still be seen. The whalers esteem it highly as an adjunct to woolen clothing, as being sufficiently warm for those who are living on shipboard, yet not so warm as reindeer clothing, which becomes oppressive in high temperature.

FOOD OF SNAKES.—*Sing Sing, N. Y., Sept. 24.*—One day this summer I was fishing on a bridge that crosses the Croton River near Sing Sing, and I noticed a commotion in the water where I had some perch on a string to keep them fresh, when I saw a large water snake trying to get one of the fish off the string, and after watching his efforts for some time I killed the snake with my fish pole.

Fish Culture

OLD FISHING ITEMS.—In looking over the files of the *Republican Waterman*, of Greenport, Long Island, for some special information, we came across the following items which we thought worthy of putting upon record. The dates in parenthesis are those of the issue of the paper in which they were found:

(May 20, 1875). Large quantities of menhaden have been caught by the fishermen during the last week, some of the gangs taking 100,000 or over in a single day. Although of fair quality the fish do not yield as much oil as their appearance would seem to indicate.

(May 20, 1875).—The *Stonington Mirror* says that during the past month over 100 tons of fish were shipped to New York each week from Norfolk.

(Oct. 9, 1875).—Mr. Blackford says the amount of fish used in the cities of New York and Brooklyn in one day, say on Friday, is as follows: Haddock, 200,000 lbs.; codfish, 30,000; bluefish, 15,000; striped bass, 2,000; fresh mackerel, 20,000; halibut, 100,000; Spanish mackerel, 2,000; refrigerated salmon, 5,500; miscellaneous fish, such as butterfish, weakfish, etc., 25,000 lbs. Lobsters, 100,000 lbs.; 200 gallons of scallops; 200 dozen soft crabs; 1,000 lbs. green turtles for soups and steaks.

(Nov. 27, 1875).—According to the *Express*, Capt. Benj. C. Payne, of North Haven, Sag Harbor, on 50 acres this year grew 5,100 bushels of corn, worth 40 cents per bushel, \$2,040, and 100 tons of stable straw, at \$8 per ton, \$800—in all \$2,840, manured with fish scrap. Capt. Payne and his son Gilbert have also carried on the rendering of oil from menha-

den, having tried out 7,500,000 fish, from which they made 27,520 gallons of oil, sold at 40 cents per gallon for \$11,008, and have on hand 800 tons of scrap, valued at \$10,400.

(May 13, 1876).—On Monday porpoises having drawn a body of menhaden into Mattituck harbor, the Coast Fishing Co., of which Andrew Cox is captain, made a haul of their seine (one and a quarter miles long), and enclosed it drew to land not less than 800,000 of the fish, most of which were very fat. Farmers have since been busy cutting it away to place on their fields as manure. This is the largest catch ever made at that place, but at other points on the river bay hauls of 1,000,000 or more have been made in former years.

SPEAKING FISH ON SPAWNING BEDS.—*Rochester, Sept. 27.*—A great deal of damage is done by the farmers and people living in the vicinity of our inland waters by spearing while they are on their spawning beds. The fish come to the shallow water and on the shoals to cast their spawn, and are easily seen and speared at night by the aid of a jacklight. Large numbers of salmon, trout, black bass and other fish are killed at a time, above all others, when they should be left alone. The last thing a farmer would think about doing would be to kill his sitting hens. The result of such a course would be no chickens, and a continuation of such a practice would soon exterminate them. This rule applies to fish as well as fowls. The salmon, trout and white fish cast their spawn during October and November, the black bass from June until July 10; Oswego bass from March 10 until June 1, the walleyed or yellow pike from April 10 until May 20th. It seems to me that all fishermen cannot fail to see the great importance of protecting their fish during the time they are on their spawning beds, and that it is for the interest of one and all to do what they can to accomplish this end.

SETH GREEN.

FAILURE OF THE OYSTER-SPAT IN HOLLAND.—A correspondent in Holland writes us as follows: "I have been on an expedition trip to the Zander-Zee on account of the oyster and winkles. I was only three weeks there, and I had no assurance that fishing in breeding time can do I had found out, but that by coming back looking over the oyster beds, I had not brought up. I have only been able to find two spat this year, and this is an excellent year for spat. When ever will be restored we can commence by closing the fishery entirely for at least five years."

BLACK BASS IN PECONIC RIVER.—At the recent fair of the Suffolk County (N. Y.) Agricultural Society, held at 165 Holland, Mr. H. D. McGovern exhibited his black bass, gold fish and black bass, and at the close of the exhibition he very generously donated the bass to the people by placing them in the Peconic River, where they are well known. The carp attracted much attention, and were left there to stock some ponds.

CARP IN COLORADO.—The carp which were distributed in Colorado last December are reported as doing well, and Mr. W. E. Sisly, one of the Fish Commission, has just finished the distribution of the second lot of mirror carp which were received from Prof. Baird.

ALEWIFE CULTURE.—The Belfast (Me.) *Journal* says: "Large numbers of alewives are passing down the fishway, Penobscot River from the spawn put in Sebago Lake by our fish commissioners the past season."

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN OCTOBER.

FRESH WATER.

Graying, *Thymallus tricolor*.
Mackinac, *Esox nubilus*.
Striped bass, *Morone americana*.
Pike or Pickerel, *Esox lucius*.
Pike-perch (wall-eyed pike), *Stizostedion americanum*, and *gibbosum*.
Yellow Perch, *Perca flavescens*.
Striped Bass, *Morone americana*.
White Bass, *Roccus chrysops*.

SALT WATER.

Sea Bass, *Centropomus atravrus*.
Sheepshead, *Archocentrus probatocephalus*.
Striped Bass, *Morone americana*.
White Perch, *Morone americana*.
Spot, or Calysites, *Leiostomus xanthurus*.
Spot, Redfish, or Channel Bass, *Sciaenops ocellatus*.
Tautog, *Tautoglabrus*.
Pollock, *Pollachius carbonarius*.

CATCHES TAKE THE FLY.—We are informed in a private letter from Mr. J. H. Dinkins, Fish Commissioner of Texas, that a party of gentlemen while casting the fly in the Pecos river, a stream tributary to the Colorado, caught two catfish. This, we think, is the first recorded instance of any of our family taking a fly. Now if it had been a mouse which they took we could have had a chance to show, by a short reasoning, how the relations between cats and mice can have developed a similar state of affairs between the latter and the water cats, but as the facts will not permit it in this way it may then be in order to consider if cats, recent or prehistoric, ever did catch flies. A careful examination of the illustrations on Cleopatra's needle, now in New York, fails to reveal anything which might be twisted into a confirmation of this proposition.

SILVER BASS.—We have received a letter from Mr. Rastow, Watel, Secretary of the Societe d'Acclimation, Paris, saying that about three years ago the Societe received from Mr. Begg, of Sag Harbor, near Orilla, Ontario (Canada), a few very young fishes which he called "silver bass" and said were grown rapidly to a large size, etc. The fish were larger than about three inches long and are about twice that length now, but as they have been kept in a small tank it is probable that they have not reached their full size. Mr. Watel writes to know what they may be, but we are not familiar with the name, which, Prof. Jordan tells us, is applied both to the

striped lake bass (*Roccus chrysops*), and the river moon-eye (*Hypoglan*), and we therefore ask such of our friends as may prefer to know what fish is called "silver bass" in parts of Canada to give us their other names—scientific ones, if possible—that we may inform our friends across the water of the true name and character of their fish.

Our correspondent says that some of them spawned last autumn in a little pond, and that there are now thousands of fry on hand, but as they have no knowledge of their gods, character or needs, they hesitate about stocking the waters with them. He writes: "Our fishes are elegant; they have the power of changing color instantly, and have a purple spot near the extremity of the operculum. The gills are proportionately short and thick, the belly large, the mouth small, and the upper jaw shortest."

It is possible that it may be one of the worthless "sun-fish" or "pond-fish," but that is, of course, only guess work, and we prefer to hear from some of our readers who know the fish.

A HINT FOR MENADEN FISHERMEN.—The fact that the herring is getting scarce—or, at least, is considered worthy of some sort of protection on the other side of the Atlantic—might be favorably considered by our menaden fishermen, to whom such a thing as giving the fish time to breed has been entirely unknown, or, if known, unpracticed, while they complain of the yearly decrease of their prey. On this point the *Northern Ensign* says, in speaking of it, the great quantity of immature herrings sent this year to the German markets, both from the West and the East Coast of Scotland, has revived discussion on the desirability of instituting a close time for the herring fishing. "The opinion," says the *Northern Ensign*, "is general that damage is done to the regular fishing by breaking in upon the shoals when they are forming in the early part of the season; and it is this view of the question which chiefly presses home upon the fishermen as most specially affecting their interests. Then, in the second place, it is only too well known that harm is done to the market by offering as the first fruit of the fishing season an unripe inferior article, which the buyer rejects as soon as he gets something better, and which is apt to depress the tone of prices after the superior commodity has arrived." Commenting on this the *London Field* remarks: "Fishermen and fishermen, it is believed, would acquiesce in any reasonable arrangement, and one contemporary suggests that the close time should extend on the West Coast from the beginning of April till about the 20th of May, and on the East Coast from the beginning of May till the middle of July."

REO SNAPPER.—A "red snapper," *Lutjanus blackfordii*, was caught off New Jersey last week, an extreme northern point for this fish to visit.

TROUTING IN WEST VIRGINIA.

NOVEL MODE OF ANGLING.

AS FOREST AND STREAM should be advised of all that pertains to "the gentle art," I venture to give a few notes of a recent expedition to the wild streams of the mountains of West Virginia.

The party consisted of self and friend, an expert from the "Debatable Land," who had cast flies for trout and salmon in every English and Scottish stream, and as keen-scented for game as any of his forebears who rode within the bounds of Annapolis. We left the Valley Railroad at Strasburg in Shenandoah Co., Va., and, on horseback, traversed three or more mountains. After eight hours in the saddle (the trip might be made more comfortably by vehicle on the Moorfield Pike), we reached Wardenville, twenty-five miles distant, in Hardy Co., West Virginia. Wardenville is a good place for operations on three famous streams: Wait's Run, Trout Run and Capon River. Each of these streams has its valley, and they converge a short distance below Wardenville. The most easterly is Wait's Run, the next Trout Run, which flows through the suburbs of Wardenville, and a few hundred yards northward is the Capon. The Capon, a few miles above Wardenville, becomes for eight or ten miles the "Lost River." Its waters reaching a limestone district, sink, and only a succession of deep pools connected by a feeble current remains. Every mile or two a big spring breaks out, and the Capon resumes its original proportions and name. Up to and above Wardenville the black bass, which have been in the stream only eight years, now predominate.

I will not weary you with a detail of our operations. Enough that our success was not commensurate with our labors. We paid for all we got, which is my experience in trout fishing everywhere. The result of our best day's work was 22 trout for breakfast, none under 11 inches, nor over 14 inches. It was a golden dish, and served to sweeten the pain it cost. The streams were too low, and the water too clear. And this reminds me to report the result of a former expedition, a month ago, by my companion and an inveterate fly-fisher. They had reached Trout River, the most famous stream of all this region for large trout. At the pond near Wardenville, they found the water milky and in first-rate condition.

Big trout were jumping in all directions, but not one would touch fly nor any bait. My moss-tramping friend, believing they could be circumvented by patience and art, determined to devote the day to them, while his companion proceeded upward, whipping the stream, *secundum artem*. But all his devices proving vain, in despair he laid his rod down with a five minnow resting on the bottom, and took out his pipe for consolation. In a few seconds he saw his line violently shaken, and giving it the fatal twitch, he drew out a twelve-inch trout. He repeated the operation, sometimes with live minnows and sometimes with cut bait, and he caught, thus fishing on the bottom for trout, sixteen, none under a foot, and one seventeen inches in length. When his companion returned from his fly-whipping up stream, troutless and disgusted, and was confronted with the sixteen golden beauties and informed of the process of capture, he exclaimed indignantly: "I could have had them on the terms." Yet he forthwith went to bottom-fishing himself; but too late—the trout had quit feeding.

The next day the same party struck the stream (Trout Run) some seven or eight miles higher up. Bad luck attended all their early operations, and disconsolate, they threw their live minnows on the bottom, and sought comfort in the pipe and tickler, when a lucky thought struck a native angler, who was one of the party. "You see that spring," said he, "coming in at the head of the pool: I will go and muddy it and see if that won't make them bite." No sooner said than done. In a short time the riled water made its appearance, and immediately the lines were shaken. The result was twenty-six trout over twelve inches in length. On the following day, at the same place, the same experiment was tried, with a result of eighteen trout of like proportions.

I am vulgarian enough to prefer bass-fishing to any trout-fishing I've ever known—certainly to trout-fishing on the bottom, whatever the results.

One fact is clear and constant, that the trout in the mountains of Virginia and West Virginia prefer black crickets, grasshoppers, black bugs and minnows to the fly, and in Trout Run, Conroy's most artistic fly with reversed wing will cast its shadow on the water in vain. And another fact equally certain is that Mr. Seth Green's cast of eighty-six feet would be a useless accomplishment in all this mountain region. With high reaching laurel and overhanging boughs, the angler will be lucky to make a cast the length of his rod.

One of the trout had in its stomach eleven locusts (17 year), four bugs resembling June bugs, one grasshopper and one minnow, and was taken by an earthworm or lentile. It would be satisfactory to know (if the cause is general) why muddy water prompts the fish to feed. Does it whet the appetite, or is it the apprehension that the water may become too muddy to find food, and they prudently lay in a store in anticipation of an enforced starvation? This would imply memory and reason; but fish may have more sense than some people suppose.

All this region abounds in game—deer, wild turkeys and pheasants in profusion, with now and then a bear or wolf and catamount.

SHENANDO.

"GRUBS" IN FISH.—There is a point relative to bass fishing and cooking which I would like to ask the opinion of Dr. Henshall, G. A. S., of Chicago, W. E., of Chicago, and others who know the fish sport these fish give, the following questions: "Do the bass they take have worms or grubs under the skin? Are these grubs injurious to persons eating the bass?" We are prompted to make these inquiries owing to a diversity of opinion among some fishermen and naturalists, who were camped up in the woods during the summer.

They fished one lake and caught some big fellows. They took them to camp, cleaned and skinned them, when some big grubs as large as maggots came out of the flesh. Some moss-backers told them that bass having these grubs were unfit for food. They tossed them into the lake, and pretty soon some fish crawls found them and carried them off.

These fish were caught in an inland lake fed by springs, but the water was warmer than the water of Lake Michigan, hence the grubs were said to exist from this cause.

Another day some of the party visited a Lake some miles from their camp that is noted for its fine bass. They caught some good ones and carried them to camp, seven miles, expecting to have a feast free from grubs, because the water was colder and the lake a large one fed by many springs and rivulets.

The fish were put into a spring of cold water (ice-cold), and while waiting. When they dressed them they were hard and firm as though they had just come from the water. They found in them the same grubs, about the same size, and when put under a microscope exhibited the same form and manner as the grubs taken from the bass caught in the warmer water of the small lake. The party varied their trout fishing by these occasional days after bass, so another day tried the large lake connecting directly with Lake Michigan, and where bass are caught of large size.

They expected something good from it, because the fish feed on minnows and have abundance of cold, clear water. Their flesh is firm and sweet. The fish themselves are gamy as one could wish, fighting to the last and running up to 4½ pounds in weight, but when dressed and skinned the same grubs appear.

I need not say every one in camp felt some compunction in eating them, though the fish were all one could desire when well cooked, yet these grubs were the interesting theme while in camp. Possibly, had the party made less pretense of being *scientific*, those bass would have been voted splendid; but when these big fat grubs rolled out as large as a wheat grain every one felt some queer sensation in the region of the stomach, and the standing joke was, "How many of those fine fellows did you put away for breakfast this morning?"

We would like to know something of the experience of gentlemen who have taken bass through the many lakes in the Northwest, if this has been their experience, or are these grubs peculiar to the Michigan lakes, where so many of us spend our summer fishing holidays.

I trust I shall not take up too much of your space in asking the opinions of others concerning these parasites, "if such they are."

W. D. T.

Chicago, Sept. 25.

FISHING IN MINNESOTA.

A CORRESPONDENT of your journal, in the issue of Sept. 9, states that Lake Tetonia is said to be the best fishing ground in the State. Now, I do not wish to dispute the gentleman's statement, but he wants to tell of something more "fishy" than a string of rock bass averaging near a pound to sustain his statement. Besides this, he says they were filled with parasites, and it isn't likely that many persons would eat fish filled with these animals; so they are no better than so much carrion, and I think he is in the wrong when he makes his statement on the superiority of that lake as a fishing ground. If he has traveled through Minnesota, and found nothing better than the aforesaid to tell, he is certainly most unfortunate. Heretofore, we have never told of the rock bass here, but have considered them as uninteresting to very little in comparison with the trout and finer varieties. But while we are speaking of rock bass, we might mention the two-pounders and over, that to catch is an everyday occurrence. I have seen rock bass of that size snap at the hooks before they would fairly touch the water, and it would take a much longer time to detach the fish than to hook them. I myself have often caught black bass that weighed 4½ pounds, and I know of reliable parties that caught them weighing six and seven pounds, and even higher than that. They were well on the trolling hook and by bait, and I have no doubt that they would take the fly well if given the chance.

Perhaps I am mistaken when I say that Detroit has the

best fishing of any locality in the State, but I will try to sustain my statement, and give a few results of fishing excursions.

One that I took myself in the early spring is especially vivid in my mind. A party of three, embodying myself, started down the little stream, known as the Pelican, about 1 p. m. A ride of about twenty minutes brought us to Muskrat Lake, and although we had never fished here nor heard of anybody having done so, we concluded to try the place as an experiment, and we soon came to a standstill. Before I had thrown my line my fellow fisherman had landed a fine rock bass. I soon followed with another, then we went on, and others, and here I lose all recollection of the order in which they came, as fish after fish came tumbling in, black bass, Oswego bass, rock bass, pike, pickerel, perch and sunfish, and—I must not forget—one "bull-head." After we had caught some forty fish we lifted anchor, and proceeded down the stream until we came to Lake Sally, a beautiful sheet of water about twelve miles around, and here we struck a temporary camp and prepared a lunch. While the other two representatives of our party of three were preparing and frying fish on the bank and smoking, I landed three more fine fellows, among which were a fine pair of Oswego bass weighing over four pounds each. After eating our lunch we proceeded to return, and soon arrived at Muskrat Lake, where the other two decided to walk back while I took the boat. As I was passing over our first "bottle-ground" the temptation was too great, and I decided to again try my hand at them, and was soon hauling them in at a lively rate. About the fifteenth fish I decided that I would catch twenty-five before leaving, but unfortunately on the twenty-first fish my hook broke at the point and left me in rather a predicament, as I had no other about me. I did not give in, however, and after throwing about a dozen over the boat I succeeded in landing the four necessary to complete my quarter hundred, and started back and arrived at 7 p. m.—six hours fishing—with the following result: Twenty-one black bass, fifteen of which weighed on an average of four pounds; fifteen pike, whose weight I did not test, but which were extraordinarily large; thirty rock bass not weighing nearly one pound, and filled with parasites; but large, dew fellows, some of them tipping the beam at over two pounds; three pickerel, one sun-fish, one sun-fish, one perch, and one bull-head or mud trout. In all these must have weighed upward of two hundred pounds.

Two other parties, Drs. Carman by name, caught eighteen Oswego bass in Lake Sally in two hours, all with a common spoon trolling hook. They averaged four pounds. A. E. Bowling and R. E. Metcalf took a drive to Floyd Lake one afternoon and caught twenty-eight black bass, several of which weighed six pounds. Mr. Amos Bowman, of St. Louis, Mo., and a brother of Marshall, Mich., were out on Detroit Lake one day, and soon returned with a half barrel filled to overflowing with some of the finest specimens of the finny tribe that ever man's eyes fell upon. We might go on mentioning other fishing experiences of this kind, but we think we have sustained our statement on Detroit having the best fishing in the State, and if any other enthusiast doubts the same we would be most happy to hear from him, and we will give him our hand in fellowship, agreeing on one point, that there is no place like Minnesota for a person to get his fill of fish.

It.

A STRANGE CATCH.—*Hightstown, N. J., Sept. 27.*—On Friday last I was pike-fishing with two others on Outlook's pond, near Spotswood. When we went ashore for lunch at noon we left our pole sticking in the mud bank of the lake. On this pole was a line with one wend single hook. It was in plain sight all the time and no one went near it until our return, when we found on it two pike, one about twelve ounces, strung through the gills; the other about a pound, hooked in the jaw. The first pike had evidently taken the minnow and hook and ejected them through his gills. The second pike, hooking himself, had drawn the line a foot or more through the gills of the first. This kind of a double catch was so strange that I hardly dared believe my eyes, but being a sportsman, I at once took the skulls of my companions, Messrs. Frederick Parr, and James Scudder, of Cranbury, to the truths of the facts as above stated. Is it not rare? *Thos. B. Appleby.*

NEW SPORTING GROUNDS.—*Timberoth, Ont., Sept. 25.*—I am here in a so to speak for the sportsman, new country. About thirty miles north of the city of Toronto, on the north shore of Lake Huron, there is a beautiful chain of lakes, and I shall, during the next week, have a fair view of them, and send you a description, which will probably prove interesting to your readers. I have not succeeded in getting a muskellunge that I wanted for comparison of teeth and vertebrae between pike and muskellunge. Believe me, the latter are not as plentiful as is generally believed.

FOR FLORIDA.—It is frequently the pleasant privilege of FOREST AND STREAM to extend acquaintance among gentlemen sportsmen, and in this interest we are called upon to say that a gentleman, a journalist by profession, who with his wife spent last winter in Florida, is desirous of meeting one or two other couples who would like to go to the Gulf coast or South Florida the coming winter, and spend one or two months in gunning, fishing, and having a good time generally. Correspondence is solicited that references may be exchanged and a congenial party organized; and any letters sent to "Scribe," care of this office, will be promptly forwarded.

CANOE AND CAMERA.—Mr. Thos. Sedgwick Steele, the author of "Canoe and Camera," the most elegant sportsman's book of the year, is now on a tour over part of the routes described in that volume. In a note written just before he started, Mr. Steele says:

I intend to follow the old course of my book, "Canoe and Camera," until I reach Chamberlain Lake, where, instead of turning South into the vast lakes of the Northwest as before, I shall follow a northerly course to Eagle and Churchill Lakes and turn east into Spider Lake. From this point through Echo Lake, Osogood Carry, to the Mamsanguan lakes the passage is difficult, all depending on the state of the water, but the latter lakes once reached, a pleasant and easy passage is open to the Arrostook waters, landing one at the town of Caribou, Maine.

Col. Lyman B. Goff, of Pawtucket, R. I., was the first tourist to make this trip, in Sept. 1879, and he will be my companion this year. For the last few weeks I have been practicing with a new camera called a tourgraph, and I must confess that I am perfectly delighted with it. No knowledge of photography is necessary, the plates being

furnished all prepared, and the work being perfectly mechanical. I shall take eight dozen plates into the woods, and hope to return with a good idea of the Arnotstock country.

Game Bag and Gun.

GAME IN SEASON IN OCTOBER.

Moose, *Alce americana*.
Caribou, *Rangifer caribou*.
Elk or venison, *Cervus canadensis*.
Red or Virginia deer, *C. virginiana*.
Fur-bearing—red, black and gray.
Hares—brown and grey.
Beaver or rice bird, *Limnithya*.
Wild turkey, *Meleagris gallopavo*.
Pinnated grouse or prairie chicken, *Cathartes aura*.
Ruffed grouse or pheasant, *Bonasa*.
Quail or partridge, *Ortix virginiana*.
Sora, rail, *Porzana carolinensis*.

Woodcock, *Philohela minor*.
Black-bellied plover, ox-eye.
Squabada, *Colaptes auratus*.
Yellow-bellied cuckoo, *Ammodramus longirostris*.
Turnstone, or calico hawk, *Streptopelia*.
Red-breasted snipe, dowitcher.
American goldeneye, *Colaptes auratus*.
Red-backed sandpiper, or ox-bird, *Tringa macularia*.
Great marbled quail, or marlin, *Tringa macularia*.
Wilson's quail, *Wilson's quail*.
Whitethroat, *Wilson's quail*.
Tattler, *Wilson's quail*.
Yellow-shanks, *Wilson's quail*.

"This enumeration is general, and is in conflict with many of the sportsmen."

"By birds" generally, including various species of plover, sandpiper, snipe, curlew, ox-eye-cuckoo, surf-bird, phalarope, avocet, etc., come under the group *Limnithya*, or shore birds. Many states permit prairie-fowl (guinea-fowl) shooting after Aug. 15.

LARGE GAME AT THE WEST.

WE publish below from the London *Field* a communication from the pen of Mr. W. D. Pickett, whose frequent communications to the FOREST AND STREAM have always secured an appreciative reading among sportsmen of intelligence. Mr. Pickett's long life in the country of which he writes, his practical knowledge of the game inhabiting that country, and his general information on all points of the subject under discussion attach a more than ordinary claim for attention to his views. The question of how efficiently to protect the large game animals of the West is one of very great importance, and it is one, too, which is likely to be neglected until it shall be too late to provide a sufficient remedy.

An experience and observation of a good many years as a sportsman, with all kinds of game, more especially for the last four years with the large game of Montana and Wyoming, has led me to infer that most of the useless slaughter for which sportsmen are responsible is done by the novice in each class of sport, whether snipe or elk. When thrown with game he is not accustomed to hunt, he appears seized with that inherent love of killing, common to all men as a rule, and not particularly creditable to "man," on the supposition of his being "the noblest work of God." He is probably also enthralled with the ambition of making a big bag, and so comes the slaughter, providing he is sufficiently skillful. When the novelty of the sport wears off he calms down, loses the desire for promiscuous killing, and then squares back on his dignity, and is ready to pitch in and criticize the many who are sure to follow his pernicious example when temptation comes. He holds true especially with large game sport, and it is not safe for one who has not been thrown among an abundance of large game to criticize too severely those who are more fortunate, and shoot off their gun too often. From a humanitarian point of view, it is fully as reprehensible to kill uselessly the smallest sparrow as the noble elk, and it is well for all of us to keep vividly in our mind's eye those grand words, "Lead us not into temptation," and "Let him that is without sin cast the first stone."

However true the above may be, I do not believe the quantity of large game in Montana and Wyoming has been affected by the amount killed for "sport" or for purposes of food. This opinion is entertained by others equally competent to form an opinion. The natural increase of these animals more than supplies loss from that cause. It must be borne in mind, too, that a great deal of useless sympathy is wasted upon the elk and deer, when these large bags are reported. It is well known that the sportsman who kills these large bags in a great measure filled by the use of paper pellets, which, while they flatter the vanity and satisfy the ambition of the sportsman almost as much as the leaden article, yet rebound harmlessly from the noble forms of the deer and elk.

The problem of the preservation of the large game of Montana and Wyoming—now the best game districts of the continent—is dependent entirely upon one condition—the price of "pelt." As long as the price of antelope and deer skins remains less than the cost of the hunter, and the elk skin less than 12 cents, there will be few killed, except for food. When the price rises above these figures, the destruction will go on, in a greater or lesser ratio, in proportion thereto. This can only be prevented by supplying each band of game with an escort of cavalry. Since 1875, in Montana and Wyoming (unless too near the U. P. Road), all kinds of large game, except buffalo, have steadily increased, and simply from one cause—the price of skins did not justify the labor of getting them to market. The destruction of the buffalo has steadily increased, and has become a factor in the solution of the Indian problem. It is now generally recognized, among those who have studied the subject, that the sooner the buffalo is exterminated, the sooner will the Indian be tamed and compelled to remain on his reservation. As long as the buffalo are abundant, he will not be content with his life there—he will break away and live the free life of the plains, to which he is deeply attached. Accordingly, he is encouraged to destroy the buffalo, and every facility is given him to that end. Looking upon it simply as a factor bearing upon the civilization of the Indian, there is no question of the wisdom of this policy.

As regards elk, mountain sheep, deer and antelope (the only real game animals), the question of their preservation is a serious one. Early last fall, deer and antelope skins rose in price to 20 cents at the trading stores, and last spring they were 30 and 35 cents per pound; elk, 15 cents per pound. The consequence has been that every unemployed man in the territories, unless too remote from rail or river transportation, who could raise a rifle and had slight skill as a hunter, was out "hunting for skins," for several months during the winter. Those unable to buy the outfit were "staked" by the small traders. Moreover, the winter was unusually cold and stormy; the temperature receding in successive cold spells to 55°, 28°, 20°, and 32°. The cold winds drove the antelope and buffalo from the plains to the north into the Yellowstone Valley, in the mountains, and the storms and deep snows in the mountain drove the elk, mountain sheep, and sheep down into the same valley, so that there were unusual facilities offered for their destruction, as will the more readily

appear from the following facts obtained from Walter Cooper, gun and fur dealer of Bozeman, during a recent business trip down the Yellowstone, and from information since from agents. His estimate of the killing, up to the beginning of March, was as follows: 10,000 buffalo killed by Indians, 7,000 buffalo killed by whites, 20,000 deer and antelope, 3,000 elk. By multiplying four-fifths of the buffalo by 400lbs., the deer and antelope by 50lbs., and the elk by 300lbs., those interested in food statistics will obtain the total pounds of food destroyed. This is only one district.

On the Missouri and in the country toward the U. P. road the same destruction went on, though it is to be hoped not to the same extent. These figures appear large, but are not much to be wondered at when the facilities for killing the American elk, elk, humped with horns, are killed, and which would be here described did space permit. From twenty to fifty antelope per day is not an unusual score for a skilled and athletic hunter. Huddled together in the gullies, the hunters, usually armed with Sharp's side, by firing into the mass, killed two or three at a shot. There is a pretty authentic record of one man killing (his partner following and skinning) seventy-eight in one day, and six hundred in one month.

The writer for several years past has been the patient listener to every huge bear and hunting story that has been floating around these mountains for the past fifteen years, and flatters himself that, by an almost daily habit of separating the wheat from the chaff he can recognize the genuine article, and yet thinks from the source of information the above stories are substantially correct.

Is there no law to stop this destruction? There is a territorial law protecting game after the first of February, and I believe altogether if not killed for food. The destruction was greatest previous to that date, but continued until the break-up of winter, when the buffalo and antelope scatter on the plains, and deer, elk and sheep return to the mountains. Unless the price of skins goes down to the figures before mentioned, the same story will be repeated during the coming winter. Even were these persons to inform, it would require a regiment of cavalry to make the arrests. This destruction is carried out as a means of making money. Many of the men are miners, who work hard all winter to make a "stake" to continue their prospecting operations during the summer, all hoping to strike their "bonanza." A few do, but the many repeat the same routine for years. I heard of two miners of this class a short time since who were offered \$100,000 for one lead. Another party actually sold one lead for \$50,000. And so it goes, the success of one encouraging the flagging spirits of the many. I have rarely known a man of the class kill an elk or deer for the sake of killing, and except for food it is too old a story—there is no temptation.

In conclusion, Americans, and especially American sportsmen, are always glad to see British sportsmen. In spite of the startling statistics above given, in the language of John Smith, the immortal razor-strop man, "There are a few more left of the same sort." Good sport can be had in these mountains for at least five years to come. Bear and mountain sheep are perhaps more abundant than in any other part of the Rockies, are not affected by the arts of the "skin hunter," and afford the finest sport of all game animals.

The British sportsmen who have visited Montana and Northwest Wyoming have, within my knowledge, been content with very moderate bags, and we hope their example will be followed by those coming after.

As the Utah Northern Railroad has reached the southern boundary of Montana, I am sure the number of English tourists to the Yellowstone Park will soon be materially increased.

GAME RESORTS ABOUT TORONTO.

HAVE just returned from an excursion to Canada, where I went for some shooting as well as the trip, which was pleasant in the extreme. Toronto was the objective point from which I would go out into the surrounding country shooting, or on the lake fishing, and generally return at night. Very good duck shooting can be had at a small shallow bay called "The Marsh," within a mile of the city, to which anyone can drive, and where Captain Smith, in going out in the morning, boats to the shore, and the moderate sum of 50 cents per day, with full directions as to the best place to locate, etc., gratis. Still better shooting can be had on some of the lakes north and east of the city, where wild rice, that ducks love to feed on, grows in profusion. Mr. Rawbone, dealer in guns, ammunition, etc., on Yonge street—a thorough gentleman and ardent sportsman—would, I am sure, be glad to direct any one a stranger there, as he did me, to good localities where game can be secured.

The Muskoka District, about eighty miles due north, is noted for its good deer hunting. Each year parties from Toronto go up there with all the paraphernalia for camping out—though board, hounds and guides can be hired very cheaply—and stay two or three weeks, generally meeting with good success, and feeling well repaid for the journey. The open season did not commence this year until October 1, though I heard of parties killing them in September.

Any one wishing good rabbit shooting would do well to visit Mr. Henry Rawbone at Georgetown, about thirty miles west of Toronto. He keeps a large kennel of fine hounds, and is ever ready to take a hand in the sport. His table, a model of cleanliness and liberality, is calculated to suit the most fastidious. The Canadian bunny differs considerably from our hare, inasmuch as it is larger, and turns white in winter. The season opens September 1, though later on when the cover is not so thick, say toward the latter part of October, is the best time, in that it applies to nearly everything in the fur and feather line up there. The nearer toward the end of the year the better. The game prospects were never so promising, owing probably to the open winter. There is one exception to this, that is in regard to quail. Some years ago they were very plenty, but suddenly began to thin out and get scarce; then a law protecting them for three years was passed, but at the end of it they were scarcer than ever. What can be the cause of this?

The answer is unable to explain it. I noticed great numbers of hawks of all sizes, from the cunning little fellow who makes sparrow hunting a specialty, to his larger brother who displays a weakness for chickens. These, in my estimation, contribute largely towards the extermination of poor Bob White.

Board can be had in Toronto for about fifty per cent. less than in New York. At private houses six dollars brings excellent accommodations, and I have even told that for three and a half dollars per week one can find comfortable quarters. The hotels charge about two dollars per day; among the good ones being the American House, which is kept by an American, and is handy to all the railroads and boats.

I will give you a brief sketch of the route I took to Toronto with the attending expenses, which may be of interest to some of your readers. Took the six P. M. train at the foot of Chambers street, on the Erie to Niagara Falls, fare \$0.25 for single ticket; then \$0.25 stopped at Buffalo for breakfast—7:50—at eight o'clock next morning. Arrived at Niagara Falls about ten, and spent the rest of that day there and the next night. Stopped at the Spencer House—\$2.50 to \$3.00 per day—thence by C. & H. R. R., next morning to Lewiston where connection was made with the steamer (Chicom) for Toronto. Through ticket from Niagara Falls to Toronto \$1.90. The pass of about thirty-five miles across Lake Ontario is very pleasant when the weather is fine, but when the wind blows pretty strongly the trip is long and tedious, and lemons are at a premium. The steamer arrives in Toronto at half-past two in the afternoon, occupying about two hours in crossing.

A person with three weeks' vacation can make the round trip from New York for about seventy dollars, including a stop-over of a day at Niagara Falls, which should not be missed. Seeing the Falls by electric light at night is alone worth the money the whole trip costs. I was just a little short of twenty-four hours on the road, coming down from Toronto, which shows that not as much time is wasted, as most people suppose, in going and coming.

Persons going with the view of shooting should not start until late in October, as I said before. I was there in September, and though I had some very fair duck shooting, was on the whole rather disappointed, being a month too early. I attended the Industrial Exhibition, with which I was much pleased, but was too late for the deer show, which I hoped to see, and intended making the principal subject of this letter. New York, Oct. 8. TIM. BENDMOORE.

PHILADELPHIA NOTES.

WE have about reached the close of our rail shooting season, the cool nights of the past week having had the effect of driving the birds further South. Yet some fair "beats" have been reported during the last run of afternoon tides. One of the Messrs. Sartori, with Benny Badger to push him, killed on upper Tincum fifty-six birds, on a morning tide, in excellent condition. These late stayers are invariably fat and lazy.

The diversity of the winged variety have not been known to be so plentiful in the Delaware River for many seasons as this, and we learn of good shooting last week at daybreak during the morning flight of the blue-wing.

Next week will usher in our quail season, and many are the trips already planned for a first crack at this prince of game birds. Your correspondent is still firm in his opinion that the open season for quail shooting should not begin until November 1, and intends to wait until the birds in this section are over their running proclivities, and devote his time to woodcock and the ruffed grouse in the Lehigh Valley and thereabout, making his first trip on the 13th of this month, when an account will be given to your readers.

It is not unfortunate that the Philadelphia Sportsman's Club, or, as it was latterly called, the Philadelphia Game Protective Association, has virtually gone out of existence? The charter has been retained, however, and a few of the sportsmen occasionally call a meeting when any important subject bearing upon game protection is desired to be discussed.

Nothing is ever heard of the Philadelphia Kennel Club, which gave such a grand bench show shortly after its organization. We doubt if there ever appeared at any show such a great display of setters as at this, and it is hoped a second may be held under the same patronage.

The great improvement in our native breed of setters, owing to the importation of the best English dogs during the past few years, and the consequent introduction of this blood, may be readily noticed on our streets by the lover of the canine race. At least one-half of all the setters seen following at the heels of their masters show the unmistakable form, in part, of the improved strain. This, mingled with the rugged, sturdy old native dog, seems to give us precisely what is wanted for our varied shooting.

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It may interest some of your readers to learn of a successful case in the treatment of a dog for the ordinary round worm, on the part of the writer, during the past few weeks. The animal in question was a medium-sized Scotch terrier, belonging to a gentleman who knew nothing of the diseases to which the canine race is prone, and in answer to my questions whether his dog was given to eating foreign substances, such as straw, ashes, etc., and if his coat presented a dry, unhealthy appearance, and his appetite was at times ravenous and at other times poor, he replied, "Yes; your description corresponds exactly with his condition." My treatment was to administer on an empty stomach—say, after a fast of four or five hours—a teaspoonful of Fahnstock's Vermifuge, following it in three hours with a tablespoonful of castor oil, with a few drops of anise-seed. This expelled, after the first dose, three large worms, and a repetition two days after brought away four more quite as large.

Fahnstock's Vermifuge has long been known as a good remedy for worms in children, and for this reason I was induced to try it. I have never known it to fail in cases of ordinary worms. For tape worms I have found it nothing but a pessimum. It is a pleasant-tasting glass or in flings made into a bolus, the pesky things stick so closely to the walls of the intestines.

I shall try to keep you posted on Philadelphia affairs as they occur. More next week. 111010.

THE CHOKE BORE POWDER.—We have recently had some tests made of the new Dupont Choke Bore Powder, and the results are such that we can recommend it to sportsmen as a very excellent explosive. In the tests made it was compared for cleanliness with one of the standard rifle powders and was found to compare favorably with it. The pattern and penetration made were excellent, and the powder, as a whole, is a very good article for use in any guns, but especially in choke bores.

DUCK SHOOTING AND DOG BREAKING.

I HAVE just returned from our marsh club grounds which lie on the Lake Erie between what is called Warlick's Canal and Crane Creek and is said to be the best mallard and black duck grounds on the lakes.

I found our keeper and his wife, just settled in their cosy quarters and our rooms all in readiness, bunks all made and a fire in the stove, and dinner was on the table when I arrived. I spent three days ducking over the marsh, mostly laying out work for the men, clearing the different channels from the pond holes and getting boats, decoys, set poles, oars, etc., in time for our boys, when the sporting began in earnest, which will be any day now that we have a heavy north-easter after a couple of cold, frosty days. I shot a few ducks each day at morning and night flights just to keep my appetite level and get my hand in on the gun. The teal season is in its glory and as fat as butter, which they would keep long enough to send you a pair or "pieces," as our Dutchman here calls them. "Oh! yaw he caught six pieces," he says, if I got six ducks.

I must tell you a dog story, even if it is my own; but you will pardon me I know when you know it is my Ned, the speckled English setter, which I call "Messiah," because so much and wished to take home with him. I took Ned out one evening in the boat to try him on retrieving ducks for the first time. A couple of mallards came up with the wind and dead ahead—one with right, and one with left. Right bird, dead; left, winged. Both dropped in the thick rice and mud bed. I saw he marked the dead one and I saying "Dead bird go fetch," he jumped the boat and got it, as if used to it all his life. I then petted him, and sent him for the wounded one, as near as I could tell where it fell. He hunted a while, and could not find him. I urged him on, and by-and-by he commenced going round in an open space. I knew the bird was buried and hiding, so I ordered him to dig it out. And he began at the grass and mud and it flew, and so did the bird, or rather jumped out—but the dog had to dig so deep, all I could see of him was his back and tail first. Well, after chasing a yard or so, he got him and brought him in. The next day I went out at 6 A. M., and after getting through with the channel digging I got in a blind at 9 A. M. I killed a mallard, and a black duck, and all dead and back forty yards to the left. When he struck I knew from the sound he was in a mud bed. Ned marked him as well, and at my command away went the dog, and stayed a long time, over ten minutes. I thought he was tired, and was just going to start in after him when he stuck his nose through the rice, but no bird; he looked very meek and sheepish. "Go fetch dead bird," I said. He turned and went in again; was gone about three minutes, and came poking his nose in again, looking very sneaking. "Now, Ned," says I, "go and get that bird, and no money business, do you hear? I'll flog you if you do not," and cracked my whip. Away he went, and in the next minute he returned, and no bird yet. "Confound your picture all freckled," says I. "Go and get that bird, do you hear? or I will make a sieve of you." I dropped my hand to make for the gun. He knew, and turned back, and in a minute I heard the water splash and saw him going across the pond below toward the house. I let him get on the other side, and just as he started on the left I fired (calling to him first) about ten feet ahead of him. He knew that I meant business, and ran back to the boat very penitent. I wanted to teach, but looked fierce, and showing my whip said: "Now, once more, you go—get that—duck, and do not come back without it. You know where it is and are too stubborn to dig it out." He jumped the boat; was gone not five minutes, and came back and poked his nose again through the grass. This time he had the duck; but of all dirty ducks and dirty dogs, covered with black mud, you never saw. But the proud, subservient look, and bow of his head, and the way he came seemed to say: "There, I got him; it was hard, dirty work, but I found you meant his, and so I had to do it." If ever a dog got a good washing and dry rubbing, and a good meal, he did, and now he is just crazy to retrieve all the birds, and works splendidly any distance.

I flatter myself I am quite a breaker. This is a long and tedious story, but I was so proud of a dog that was so cunning and so stubborn, and yet sensible enough to know his master's bid, and render to him the duck he found the first time I knew, but was too foolish or lazy to dig it out (see?) that I could not help inflicting it on you, knowing you a thorough lover of a good dog.

Tulalo, O.

A. C. N.

CORNFIELD DUCK SHOOTING ON THE RIO GRANDE.

IT is seldom that the average sportsman has an opportunity to complain of too many ducks, but during the "duck season" here in winter, they are certainly too numerous for real sport, though just right for the "pot-hunter." But taking the season between June and October, when the winter ducks are north on their breeding grounds, and when we have but one species here, the *Deschampsia autumnalis*, or "cornfield duck" of the natives, then is when the true sport comes in. Suppose we take a trip to-morrow morning—the reader and myself—and we will see what we can get. There is no rushing about at two o'clock in the morning, a hasty breakfast and a five-mile drive or so, as is often the case in the East, but we get up leisurely—everything is done leisurely here—have our coffee, and before breakfast we will leave for the field, which is no further off than three gun-shots. Arrived at the place, first examination will be: "Why, this looks like an old cornfield turned out to a meadow. There is quite a lake, and there are pools of water everywhere, and where there is dry ground the grass must be a foot or two high—and where are the ducks? I can't see one." Well, we have just had an overflow in the river, and when it receded it left this lake, and this year the flood came so quickly that it drowned most of our crop, and so this field is a perfect paradise for the ducks. You must remember that the habits of the cornfield ducks differ from those of other ducks; they never light right in the water, but along the edge. This is why they are why you do not see any, but they are here and pulling the husks from the ears and having a glorious feast. But hark! do you hear that loud, clear whistle? and look! there is a pair just barely in sight. So loud and clear is their whistle, which is almost continually kept up, that it can be heard nearly as far as they can be seen—you can hear for yourself that it has not the least resemblance at all to the "quack" of most ducks. Now listen and hear the ducks that are already feeding and singing; a pair here, a pair there, the fact they are scattered all around, and the beauty of it is they are only in pairs; seldom will there be more than two together while feeding. But here is the pair we heard first.

We can hardly call them handsome, but what showy birds they are! with their long reddish necks, with exceedingly long white legs and feet, that reach out so far beyond their tails; and then that white patch which covers most of the upper side of the wing, contrasts very well with the color underneath, which is black; and there, they have it!

We will start in here anywhere. We are sure to strike some. See! there go a pair the first thing. You never dreamed you were so near any. And how pretty they rise out of the tall grass, keeping close together and rising well up from the ground. Here goes for a double. If you killed both, all right; if neither, why, better luck next time; but if one, you will very likely get a good shot at the other as it comes back flying high in the air to take a last farewell look at its unlucky mate.

But our shot has started every duck within a hundred yards of us. There must be twenty in the air. Some, of course, will leave the field, but most of them will settle down again. Even if they should all leave others will keep arriving, and so the sport continues as long as we care to keep it up, or until the sun gets too hot for us to stand it longer.

But these ducks are poor entertainment. They are never fat, and do not begin to compare in flavor with our fine mallards and teal in winter, and one will soon get tired of them for the table.

A. M. P.

ECHOES OF THE "DITTMAR SPORTING POWDER."

EDITOR FOREST AND STREAM:

BELLVIEW, MICH., Oct. 10.—Thanks for that "Dittmar" expose; think I will not invest in it; was going to try it up North on partridges.

C. H.

CARRO, GA., Oct. 4.

EDITOR FOREST AND STREAM:

I am glad to see that you have taken up the Dittmar Powder and have given the sportsmen of America a little light on a subject which certainly needs it.

A. W.

PHILADELPHIA, Oct. 10.—Editor Forest and Stream.—You have done nobly in knocking down that absurd fraud, Dittmar powder, and you deserve the thanks of every sportsman in the country; please accept mine now, and believe me truly yours.

C. E. C.

MANCHESTER, N. H., Oct. 7.

EDITOR FOREST AND STREAM:

Please find inclosed four dollars to pay for the FOREST AND STREAM to May 12, 1881. Being an old man, and being unable to follow my favorite pursuits of hunting and fishing, I had concluded to discontinue the paper, but the articles on the Dittmar powder and its manufacture have pleased me so highly that I forego. I hope the public, and especially the sportsmen, will "read, mark and inwardly digest" these articles for their enlightenment and safety, for we have had enough of the imposition.

A. G. D.

HOUNDING DEER IN MAINE.—The following comes to us from a responsible source, under date of Mopang Lake, Washington County, Me., October 4:

A week ago a professional guide and hunter arrived at this lake to put the camp in order for the reception of Bangor sportsmen (?), who are now almost daily arriving with hounds to slaughter deer contrary to law. The bringing of hounds in covered carriages, escorted from sight, indicates fear of the law and its penalties, or, it may be, a sense of shame. Of course, in due time, the venison will be sent out under cover of darkness, as usual. The county warden has been notified, and let us hope, will take prompt means to vindicate the law.

BANGOR.

The Maine law provides that "no person shall hunt, kill or destroy with dogs any deer or caribou within this State, under a penalty of forty dollars for every such caribou so killed or destroyed." We have already taken occasion to publicly condemn the efficiency of the present commissioners of fish and game, Messrs. E. Stilwell, of Bangor, and Everett Smith, of Portland. As these parties referred to by our correspondent come directly from one of the centres of authority, we shall look for the speedy detection, conviction and punishment of the offenders.

PACIFIC COAST NOTES.—The game resources of their respective localities are a never-failing fund to the Pacific coast paragraphs. The Sacramento River man has been out after quail, but he reports only cats: "While quail shooting near Folsom, recently, we saw a common house-cat out in the woods several miles from town, and were informed that they are numerous in the foothills, where they live in a wild state, subsisting on birds, etc." It is said that they are very destructive to broods of young quail, and the sportsmen shoot them whenever possible." We commend to his attention the article on the subject lately published in this journal. Another complaint which we find in the same paper comes from a correspondent in White's Valley, who describes a pack of hounds which go off deer hunting on their own account, scouring the hills day and night in season and out of season, pursuing the deer. A party of public spirited gunners might with good effect turn out to hunt the hounds. Humboldt sportsmen report good duck shooting on the Bear River. Carson deer hunters bring back excellent reports of deer hunting in the mountains. Quail are plenty in the foothills about Santa Cruz and also in the vicinity of Truckee. Mrs. Ari Hopper, who is reported to be the greatest deer and bawler in Southern California, killed a large eagle last week in Ventura county which measured seven feet two inches between the tips of its wings. She also killed a large rattlesnake the same day. Visitors at Lake Tahoe are few now. The Grand Central will close for the season in about two weeks. Yet this is about the pleasantest part of the year to visit the lake. Fishing is good and the weather is still delightful. Deer are plenty about New Tacoma, W. T., and a farmer two or three miles from that town has been obliged to harvest his oats before they were fully ripe to protect them from the deer. Game, especially deer, is abundant in El Dorado county. San Francisco papers report that toward Santa Rosa, Healdsburg and Geyserville, and north of Petaluma and around Napa, the shooting is said to be good. Toward Mount Diablo the birds are said to be scarce. There are no reports of big bags from the best shooting grounds near the city. Further out, though, some of the well-known shots have been busy. Mr. Stackpool and three friends are accredited with having killed 450 quail in three days near Niles. On the Thorokmortou ranch last week Mr. Orr made a bag of 77 in one day with 100 cartridges. He found the birds very backward, but plentiful. Near Bolinas and Toulon the ducks are more advanced. In Pinole valley down toward San Bruno, and with a good dog and a fair amount of industry a good bag can be made. But then rail

hunting is very slow work where quail, no matter how small, can be had. The ducks that have come to market are in fine condition, but they appear to be scarce.

Truckee hunters have a variety of abundance sufficient to satisfy the most ambitious of them. The *Republian* of that town says: "The mountains have a variety of game sufficient to satisfy sportsmen of almost any taste. Grizzlies and cinnamon bear can be found on very short notice, by those who have lost any bear. Mountain quail can be heard whistling on many a hillside. Grouse are plentiful if their resorts are discovered, while deer, squirrels, woodchucks, badgers, foxes, wolves and lions are common in different sections. This season game of most kinds are more than usually plentiful. The Indians are having a prosperous season. We frequently see Indian parties of two and three returning from a deer hunt, with their horses loaded down with the carcasses and hides of deer captured on the trip. The lover of field sport can be accommodated by a trip to the mountains."

THE MINNEAPOLIS POST, POSTOFFICE.—*Entertainment, Minn., October 8.*—Editor Forest and Stream.—In your issue of September 30 appears a letter from a "Windom Pot-Hunter," which criticizes severely a letter and its author which appeared in a previous issue of your valuable paper over the signature of "Wausee," dated at this place September 1. Now, as "Wausee" is known to many of your readers, and as "Pot-Hunter's" letter does him great injustice, I hope you will allow me space for a line or two from a disinterested standpoint. Evidently "Windom Pot-Hunter" is mistaken in his man, and visits the sins of some "non-resident pot-hunter" on an innocent man to whom they will not stick. From my acquaintance with "Wausee" I am certain that if ever at Windom (which I doubt) he conducted himself as a gentleman and true sportsman should, and that whatever he wrote in regard to the dog poisoning at Windom was written in good faith, and on what he believed to be reliable information. "Wausee" spent the most of the chicken season here, and won the good will and respect of those with whom he came in contact, by his sportsman-like conduct as well as his gentlemanly and social qualities. He is no marked hunter, neither does he disregard the rights of farmers by "treating" passing on their growing crops, by the "hogish" manner displayed in hunting birds for market, or by "shooting them and driving off without apologizing." And I am very certain that nine out of every ten of our people will say with me—Let all such sportsmen as "Wausee" has proved himself by his stay among us to be come and hunt their fill, but "pot-hunters" are not wanted. FAIRBORN SPORTSMAN.

"Windom Pot-Hunter" would undoubtedly have made a stronger case for his side had he refrained from attempting to connect "Wausee's" personal character with the merits of the question. Both these writers using assumed names are thereby unknown to the public, and the readers of this paper are not interested in their personal character. That which does interest us is to know whether or not we can with safety take our valuable dogs to the County of Windom, Minn. Judging only from the two communications on the subject already printed we should not hesitate to do so. Moreover, we are satisfied that "Windom Pot-Hunter" and "Wausee" would enjoy an afternoon shot together, and possibly their dogs might also work in harmony together.

THE LONG ISLAND ASSOCIATION.—The regular monthly meeting of the Long Island Sportsmen's Association was held at the room of the Esplanade Gun Club, on Friday, Oct. 8. Abel Crooke, Esq., the Secretary of the Association, read a paper describing the different kinds of game and also the laws in regard to the same. It was accepted with thanks.

The Association is determined that after the next State Sportsmen's convention no one will have cause to call them an association of pigeon shooters, and in regard to this Capt. Elmendorf made a motion to appoint a committee from the Long Island Association to confer with the different clubs throughout the State, and make a code of game laws that would be applicable to all sections of the State. The Executive Committee and carried. Mr. Crooke suggested that action should be taken in regard to appointing a committee to solicit prizes. The motion then made by Mr. Ackers to appoint the President of each club a committee was carried. Motion was passed to assess the clubs for money to meet the expenses of the coming convention, and to also assess the individual stockholders for money to get stock certificates printed. A motion was carried to the effect that a committee be appointed to examine the articles of incorporation of the State Association, and report to the next meeting. The President was authorized to appoint a place for the next meeting, after which the meeting adjourned.

The L. I. sportsmen are showing the right spirit in regard to game protection, and if the other organizations throughout the State will co-operate with them we may expect a code of laws that will effectively put a stop to the work of the pot-hunter as well as to that other class of game destroyers, namely, self-styled sportsmen, who lack every one of those qualities of the real sportsman which have endeared the name and the class.

MAINE SPORTSMEN'S ASSOCIATION.—At the annual meeting of the Maine Sportsmen's Association held at Pluck's Island last week, the following named officers were elected for the ensuing year: President, Hon. P. O. Vickery, Augusta; Vice-president, Geo. C. Lord, Kennebunk; 2d Vice-president, Hon. Wm. W. Thomas, Jr., Portland; Secretary, H. F. Farnham, Auburn; Treasurer, L. W. Colburn, Portland; Director for four years, J. B. Jones, Peaks Island. The honorary committee were composed of the following: Vickery, Augusta; Committee on Charter—P. O. Vickery, Gen. W. S. Tilton, W. W. Thomas, Jr. The following committees are to report at the next annual meeting: 1st. On Laws for the Protection of Game Animals of Fur, Fin and Feather, and Insectivorous Birds—Everett Smith, Dr. E. P. Sleeper, C. F. Nason; 2d. On Fish Laws, including propagation and production—E. M. Stilwell, W. W. Thomas, Jr., W. H. Cloudman; 3d. On Enforcement of Game and Fish Laws—Martin, Wm. W. Castle, G. C. Lord; 4th. On Sporting Dogs—Everett Smith, W. W. Castle, and C. W. Curtis; 5th. On Voluntary Essays and Papers—Secretary, president and vice-president; 6th. Publishing Committee—

P. O. Vickery, H. F. Farnham and E. W. Coburn. The Executive Committee appointed the following wardens: Amerscoogin—J. P. Pettinling, Auburn; Cumberland—Frank Merrill, Portland; Kennebec—C. W. G. Martin, Augusta; Oxford—W. S. Skillings, Bethel; Sagadahoc—C. H. Greenleaf, Bath; Penobscot—E. H. Mersey, Bangor; Knox—James Wight, Rockland, York—Z. M. Cushman, Kennebec. As soon as a charter is granted, these wardens will possess the same authority as State wardens.

RETURN OF MIGRATORY QUAIL.—*Rochester, N. Y., Oct. 4.*—It will be agreeable news to all interested in the migratory quail that the experiment tried in this vicinity by the Monroe County Club promises to be a complete success. Mr. Friend, G. D. B., on whose farm three pairs of the imported quail were placed, to-day informed me that there are two birds of the birds close by where he liberated the old ones this spring. He thinks there are forty in the beaves, and when seen some days ago the young were strong of wing, and when flushed went off like the native Bob White. I have heard that some of those set out by the Club hatched large broods that seem able to take care of themselves. In this country we are making an effort to protect the native quail and grouse, and prevent shooting for three years, but it is difficult to guard against the soulless pot-hunter, one of which class last week went in the town of Irondequoit, about four miles from the city, and shot about fifteen quail out of a bevy which some of the decent sportsmen were trying to save for "seed." If we can discover who the fellow was that did this mean act he will wish his powder had been wet. There has been very good woodcock shooting hereabout since the opening of the season, but I regret to say that most of the birds found their way to restaurants. There have been a few good bags of gray plover shot on the uplands and wheat fields, and duck shooting is opening with good prospects. It has been too dry for snipe, but old ones have been picked up, and on Saturday I saw a good bunch in a market; they were shot at "the ponds" in Greece. In the last match at balls the Monroe County Club defeated the Rochester Gun Club, and the latter were vanquished last week by the Dansville Sportsmen's Association, who now contemplate challenging the M. C. C. In a fifty bird match last Thursday G. W. Crouch, Jr., beat Al. Evershed; score, Crouch, single, 26, double, 18; Evershed, single, 27, double, 11.

DRIVING DECOY.

SOME GUN TRIALS.—*Wadley, Ga., Editor Forest and Stream.* It was sneeringly asked once in the South, before the "wah," who would shoot any but an English gun? All were English. Some were cheap and worthless, some were high priced and worthless: Purdy, Richards and Green were the only makers in whom any reliance could be placed. Now all that has changed. We have beaten the world with our high priced and worthless. I have now some American firms come to the front with breech-loading shotguns that are not to be excelled in beauty of finish, in rapidity of action, and in hard, close shooting. In the following trials I used 33 drs. Latins & Rand's powder, very coarse in grain and very mild. I used 12 oz. No. 8 shot, with two No. 11 pink edged wads on powder, and very thin wad on shot. The gauge of all the guns was No. 12. To test the penetration, I used sheets of pasteboard, 1 in. in thickness, placed one inch apart. Target, 30 in. distance, 40 measured yards.

Fox, left, 284, right, 301; Remington, left, 331, right, 285; Colt, left, 226, right, 287; Stevens, left, 236, right, 251; Clabrough, left, 273, right, 298; Baker, left, 337, right, 361. Penetration uniformly 3/4, with one exception, where Colt gave 1-16.

Selecting the Fox and Baker guns as giving the best results, I fired one round, both barrels, at 40 yards, No. 6 shot, same charge as above.

Baker, left, 237, right, 251; Fox, left, 192, right, 206. Penetration same as above.

All the above guns were factory made, with the sole exception of the Clabrough, whose owner claimed that he paid \$250 for it. Comparing the results of the above trial, we find that American gunmakers have succeeded in making a breech-loader that will equal, very nearly, Greener's, one of the best in the market. Greener's guns were made in England, and that they will put more than from 250 to 300 No. 6 shot in a 20 inch circle, 40 yards; and in this trial we must allow the difference in the number of pellets to the oz. English shot and our shot, making our No. 7 about equal to the English No. 6. No one could be more surprised at the result of the above trial than myself. I had been taught to believe that English guns were far superior to American guns. About the wear and tear of the guns I say nothing, for I know nothing; but judging from the appearance of most of the American guns used in the above trial, I should say that they were honestly made.

There has been a great deal of balderdash of late years about the superiority of choke-bored guns for large shot. I cannot use buckshot in mine, for I think them injurious to the gun. With BB I can kill any game we have in Georgia, sending it through the largest turkey.

ST. CLAIR.

Our correspondent neglects to state whether the guns were bored alike—a very important consideration.

CONNECTICUT.—*New Haven, Oct. 4.*—The ducking season for line shooting opened at George Lanfer's on Sept. 25. The night previous a number of the gun club went down. The line formed at six A. M. the next morning about one hour too late and too far from the shore. There were very few ducks killed. The line broke up at one and at two the shooters sat down to one of Lanfer's capital dinners. The next week there has been an unusually good fly of wild pigeons and yellow hammers, but for some unaccountable reason very few wild pigeons have been killed. The largest bag, which was made by Messrs Mallory and Son in two mornings, was 140 wild pigeons; J. R. Brady, 20; L. Barber, 25; J. Linsly, 16 in one morning. Mr. A. Barber one morning killed 56 yellow hammers. H. and J. Linsly during the week have bagged 94 yellow hammers, 25 pigeon and 16 gray squirrels. Letts has killed about 10 and Lines claimed to have killed 12. The yellow hammers the latter he could not find as it was not on his pole. It is claimed that a member of the club has been unable to find his wardrobe since the last flight, and owing to his exposure that morning is not able to be out. The game law went off on Oct. 1, but owing to the warm weather and scarcity of woodcock there were but very few who would inform one of their success. The Potter Brothers show their bag the first day, which consisted of 20 quail, 10 woodcock and 2 partridge. David Cowell brought home five or six quail, and some home without a bird and several claim they didn't go out.

A TEST CASE.—*Osceola, N. Y., Oct. 2.*—*Editor Forest and Stream:* The Ontario Hunting and Fishing Society of this city, an association of gentlemen leasing a large body of

marsh land upon the shore of Lake Ontario, near this place some time since instituted an action against certain parties for trespassing upon their grounds and hunting thereon, such action being brought under, and by virtue of Sec. 28, Chapter 534 of the Laws of 1879 and its amendments. The case came on for trial yesterday, Oct. 1, before C. O. Case, Esq., Justice, of this city, and resulted in favor of the plaintiffs, a judgment being obtained by them for one violation of the law, the sum of \$25 and costs. This success, it is to be hoped, will deter other lawless hunters from incurring like risks, and will protect the rights purchased by the club. Why the owner of waste marsh land should not be entitled to obtain therefrom an income by way of rental, as well as from other portions of his farm by way of cultivation, is the only question involved, and we believe that a few energetic and determined enforcements of property rights, as necessity may arise, will cause the proper respect for all the Ontario Hunting and Fishing Society proper to deal with all men fairly, but they also propose, knowing and having paid for their rights, to maintain them.

F. B. B.

GAME PROSPECTS IN MINNESOTA.—*Sauk Centre, Sept. 20.*—Plenty of geese, ducks, sand-hill cranes, etc., have now made their appearance in large numbers. A good shot will have little trouble in bagging fifty to seventy-five in a day's sport. This country is free from glaring notices such as "No shooting allowed on this farm," "Don't shoot inside the fence," etc., etc., so a sportsman need not fear being driven off just as he gets ready for work. In company with a gentleman from Massachusetts, the other day, we had a splendid time in the cracking snipe and geese, and the latter, I believe, from Minnesota is celebrated. The farmers will allow one to dig "pits," and, as a general thing, seem to enjoy the sport of seeing the sportsman bring down four or five old "honkers" as does the hunter himself. In one instance we had shot a fine goose in a muddy lake, and as our dog would not retrieve, the generous old gentleman sent the "lad" to the house and brought out the "Newfoundland pup," which, it is reported to say, was a son of the famous *Argentine*, much to the chagrin of our dog, who no longer wished he had retrieved. We select the roosting places of the geese and shoot them by moonlight, first concealing ourselves before they return from supper. A rubber coat lends enchantment these evenings.

DELL.

THE HEAVIEST WOODCOCK.—*Franklin, N. Y., Oct. 2.*—I was greatly interested on reading "Parvus" letter on "Breeding Quail in Confinement" in late issue of *FOREST AND STREAM*, and I sincerely hope that some wealthy sportsman, or body of sportsmen, will step to Mr. Benbrook with the requisite funds to make this experiment to be thoroughly tested; for it not only is a good work, but a great work, one that certainly will be greatly appreciated and patronized by Maine, New Hampshire, Vermont, Massachusetts and New York, and probably many sister States, and I believe there is not a sportsman in any of the above mentioned States but will cheerfully contribute each his mite in such a case as this, as, judging from "Parvus" letter, Mr. Benbrook is the right man in the right place.

I also notice E. T. B. inquires for heaviest weight of woodcock or quail with woodcock and ruffed grouse. I will give in my testimony, as he requests. Some four years ago I shot a remarkably large female cock, which attracted my attention so forcibly that I had it weighed, and found it kicked the beam at just 11 1/2 oz. Since then I have shot two or three which I thought might possibly be larger, but was not positive, as no facilities for weighing them were at hand. This I can say is the largest American woodcock I ever saw. Let us hear from others on this, and also the heaviest weight on ruffed grouse.

M. P. McKoon.

Synapse, N. Y., Oct. 9.—I find recorded in my note book the weight of two woodcock—one killed October 10, 1874, by John H. Mann, the other killed November 10, 1877, by Jefferson Downs; the former weighing 10 ounces, the latter 10 3/16 ounces. Have no record of weight of quail.

JOHN H. MANN.

The ordinary weights of woodcock are from about 5 to 6 1/2 ounces for males, and 7 to 8 ounces for females. In 1874, while quail shooting in Warren county, N. J., late in November, we moved two woodcock one day, the only long bills we found, and weighed them. One weighed 10 1/2 ounces, the other 9 1/2 ounces and the other 9 ounces—18 1/2 ounces for the pair. These were the largest woodcock we ever saw. Quail do not seem to have been weighed, but we shall look for reports when the season opens.

MR. LANE EXPLAINS—Good Ground, L. I., Oct. 3.—*Editor Forest and Stream:* Under the heading of "All Around Notes" in the last issue of your valuable journal, I noticed a communication signed "Bedford" and dated Lanesville, Ohio, Sept. 13, containing certain statements which, in my own justification, I feel myself obliged to call in question, relying on your often proved courtesy to grant me the necessary space in your paper. In the first place your correspondent omits to mention that he applied to me by letter for accommodations, and that I immediately telegraphed him that my house was full, in spite of which he and his friends who "wanted to shoot something" came on from Hoosierland. When they arrived I did the very best I could for them, securing for them the best guide in the neighborhood and also the best board and lodging; as for the shooting they may have had at places in the bay outside of those leased by me, and which are "private" property, but I have not been informed by number of birds shot in my blinds and marshes as compared with those shot elsewhere in Shinnecock Bay. Although rather irrelevant, permit me to offer you my most hearty approbation of your exposure of that villainous compound zepeth "Dittmar powder." WILLIAM M. LANE.

A WINTER SPORTING GROUND—Indianola, Texas, Sept. 30.—I am glad to give you any information I can in regard to game resources of this section, but a few lines from my friend "Bexar," of Corpus Christi, who yields an able pen and who has hunted over this as well as the section where he now lives, would, I think, be more satisfactory to you and your subscribers. In our immediate vicinity we have very fair sport both for snipe and quail. Go out from amongst the bottom lands, sit down with your line in one hand and your gun in the other, and you are almost sure to have fish or fowl in a short time. In their season, say from August 1 to October 1, we have on the prairie thousands of "papabottes" and snipe, a good sprinkling of prairie chickens and quail (on and near the river bottoms and where there are any cover, such as bushes, etc., the quails are in thousands). In October the geese and ducks begin to arrive, and from that time until March we have snipe, and from April to June, sandhill, nigger and others. Wilson and other snipe. You need not go over 50 yards from your house to shoot snipe of

any kind, and a sportsman of moderate desires can have a fair day's shooting and not go a mile from home. The boys between here and Corpus Christi in the winter season are alive with fowls of all description, and on the islands there are a good sprinkling of deer, good camping places all easily accessible by boat, and plenty of fine fish and oysters in shallow water, almost at the door of your camp. Any of the boatmen can take parties to any of these places (and there are plenty of boats here), and a sportsman can have all the fun he desires. An experienced gunner with the appliances they use North, such as blinds, boats and decoys, could kill immense quantities of game. We use none of these here, do not take the trouble, as we can kill all we want without them. Having mild winters, parties wishing to spend the winter hunting or fishing could not pick out a better locality.

G.

LONG POINT.—*London, Ont., October 5.*—Following is the score of ducks bagged by the party of sportsmen now at Long Point. The figures show that the Marquis of Lorne knows how to handle his gun as well as the rest of his party. Your columns not long ago contained an admirable sketch of the Long Point preserves, club-house, etc. The score is as follows:

	Oct. 1.	Oct. 2.	Total.
The Governor-General.....	40	75	115
Colonel de Winton.....	20	30	50
Captain Harbord.....	24	31	55
Rev. Dr. Ryerson.....	41	27	68
Colonel Walford.....	41	27	68
J. J. Lord.....	20	30	50
Edward Innes.....	47	28	75
George B. Harris.....	20	30	50
W. R. Harris.....	12	32	44
E. Green.....	25	7	32
L. Lord.....	20	30	50
Sherriff Woodruff.....	45	30	75
Brace Allan.....	112	12	124
M. Allan.....	—	9	9
Total.....	—	—	1,112

SOMER.

OUR DETROIT LETTER.—*Detroit, October 11.*—The happy season of the sportsman is fairly upon us. Ducks are everywhere. In two days last week Mr. L. B. Jewell, of Hartford, the Ninrodian brother of the said-haired ex-Postmaster-General, backed by a well-known Detroit hunter, bagged at Point Mouille three hundred; most of them were mallard, but a fair proportion were the blue-winged teal, all fat, and such as I have had a tooth in, juicy and gamy to a degree. Andrew Jackson, the philosophical phallion of Sault Ste. Marie, recently left his native wilds and came down to Lake St. Clair to shoot civilized game. He must have slipped his will as slivers misses, but what he lacked in skill with his gun he made up in his manipulations of the *chaine*. As I predicted, the rush to the North Woods is at hand, and dealers in sportsmen's supplies are reaping a shining harvest. The pigeon shoot for the Michigan State medal, by the members of the Michigan State Medal Association, is booked for next Tuesday. There is to be a lively contest, with the result of which I shall acquaint you in my next. Mr. Jewell of course I have already written is still surveying the big marsh for duck, having returned thither on Saturday.

G. P. G.

WORCESTER, Mass., Oct. 9.—The Sportsmen's Club had a splendid day for their annual shoot yesterday, and enjoyed themselves quite as much breaking glass balls at their grounds at the lake as they would have done had they scoured the woods for a circuit of 20 miles in pursuit of game. The sides were chosen and captained by A. P. Pond and Alva Haughton, and resulted in the defeat of the Haughton side, and a splendid collation served on the grounds by Landford Tower of the Lincoln House. The score was as follows:

A. P. Pond 17, W. S. Perry 20, W. H. Cole 16, C. R. B. Hudson 16, M. D. Gilman 15, A. B. F. Kinney 16, C. R. B. Claffin 16, O. F. Taft 16, Steadman Clark 14, R. R. Shepard 12, C. H. Bowker 13, Chas. Hartwell 5; total 176.

A Haughton 19, C. B. Holden 16, G. J. Rugg 16, E. T. Smith 12, M. D. Gilman 15, L. G. White 17, A. L. Rice 16, E. S. Knowles 19, T. B. Boy 13, A. B. Joslyn 12, A. F. Hall 5; total 164.

After the side shooting, sweetstakes were arranged and all hands engaged in the sport. A handsome silver mounted pistol, offered by Mr. A. B. F. Kinney, was won by Mr. A. P. Pond who broke 16 straight, defeating W. S. Perry, who broke 15, the match being shot on the "miss and out" method. There was a large attendance, and everybody had a good time.

GAME CONSTABLES.—We have long advocated the appointment of game constables, as the only efficient method of enforcing legislation; and we are glad to see others coming around to the same view of the case. A game constabulary, as we have said before, is the only true solution of this important problem.

COUNTING CROWS.—*Hornellville, N. Y., Oct. 10.*—You wish to know how I know there was 20,000 crows in the flock? Of course I could not swear to it, but think you could safely put in another 0 and then not have too many. I counted 238 flying over a certain point in just two minutes, and they were flying like that while five of us were shooting a string of ten geese half apiece. We were in a valley and could only see a small part of the flock, but a gentleman told me that he had seen the shooting, that he had been driving under the flock for two miles or more. So you see there was *enough* for a big flock.

JOHN.

INFORMATION WANTED—GEORGIA GAME.—*Potsville, Oct. 11.*—I would like a little information in regard to the game I will find in Georgia in the country north of Atlanta, within a radius, say of fifteen or twenty miles. I expect to spend the winter about there, and would like to know something about the shooting so as to prepare myself beforehand. I use a twelve gauge gun, which I think will be able to find all the game I shall find so far inland. I suppose I will be able to get a dog down there, will I not?

DEER AT TIMS POND.—Mr. J. Warren Tucker writes: "One Sunday, during my recent visit to Tims Pond, as I sat on the shore, I saw two deer come down into the lakelot and drink of the clear cool waters, then frisk back into their 'forest home.' He adds that the whole country there is full of deer, and those who are prepared to enjoy the sport with due moderation will find Tims Pond an excellent rendezvous. We are glad to know that the proprietors of the camps there are determined to see fair play for their visitors, for the trout and for the game. To protect the country and prevent the repetition story of the Rangeleys, Adirondocks and other resorts some shrewd protective management is absolutely essential."

LINCOLN.—*Chicago, Sept. 25.*—Game is more plentiful than it has been for some time past. The ducks are on the move South. A few days since Mr. Henry Kleinman, at Calumet Lake, shot one hundred and five ducks, and on Saturday, the

Class 51. Miscellaneous Class. E D Meyer: Fannie—Black and tan, 1 year and 4 months; cross between German foxhound and dachshund. Gottlieb Meyer: Flora—White and tan, 1 year and 10

J. W. Auten, J.	15	59	19	85	18	100	52	244
Total	65	263	87	387	100	504	252	1164

THE TOXOPHILITE (Newark).

Columbus Round.

Miss M. Palmer.....	14	60	18	82	17	15	49	217
Miss A. H. Gibbs.....	14	58	16	68	54	112	54	528
Miss L. H. Spencer.....	7	41	15	49	21	123	43	313
Miss M. Carter.....	6	20	14	60	14	68	34	148
Total.....	41	179	63	259	76	318	180	816

American Round.

J. E. Hill.....	23	99	16	54	57	133	66	8-6
J. E. Hill.....	18	60	26	124	33	97	61	95
A. H. Gibbs.....	10	45	19	13	25	101	24	229
T. F. Baldwin.....	21	73	25	118	26	127	71	313
Total.....	72	280	86	352	109	460	258	1192

Grand total: New York Archery Club.

The Toxophilite..... 435 1915

Chicago Archery Club..... 435 1915

When we hear of this being beaten we will try again for Chicago

J. A. L.

—Use Hop Bitters once and you will use no other medicine.

Test it.

Cricket.

ENGLISHMEN vs. AMERICANS.

THE initial match played under the auspices of the Cricketer's Association of the United States, between American and English resident players of America, selected from the members of those clubs belonging to the Association, was played at Nicetown, Pa., on Oct. 6 and 7, and resulted in a draw. Heretofore this interesting match has been played at intervals during the last twenty-three years, the teams being selected by cliques of those most interested in the game at the time, and in consequence they have not been thoroughly representative. On this occasion, however, both teams may be considered as having fairly put forth the strength of each nation. The English twelve contained six amateurs and six professionals; the former were W. S. Patterson, of the Cambridge University eleven of 1878; Kessler, who fielded so well in the Canada-United States match; two of the brothers Hargrave, "Old Nelly" Pearson, the ex-professional of the Philadelphia Club, and Moran, the all-round expert and "How's that?" of the St. George Club. Unfortunately, Cross could not leave his business, so Giles, Sr., took his place, being one of the six pros. The other five were good ones, and England came to the front with the strongest team ever presented in a match of this character. We cannot say much for the American side; true it was first-class, but the two Tyers, on whom we hang our faith, could not get away from college, and their places were filled by Messrs. Caldwell and Morris, also fine players. While waiting for the ball to ring to clear the grounds, we had a friendly post-mortem converse with Mr. G. M. Newhall, the Captain of the Americans, about the match we saw him play in twenty-two years ago, when he was but a lad of ———. He was then one of the American eighteen who played against eleven Englishmen of New York and Philadelphia, on the Camden grounds, and the only one on either side who had played internationally over two decades ago—"such is life." In olden times all contests of this kind were regarded with deep interest. The Englishman then had the call and numerical odds, such as sides of eighteen and fifteen were pitted against them; but of late years Young America has picked up so grandly that the match has resolved itself into one that is contested on even terms.

The morning was charming in the extreme, and the soft, mellow light of the autumn sun made it the perfection of a cricketing day. The wicket, usually so good, was soft and spongy, and the ball cut up and bumped badly as the day wore on. Eleven o'clock was the hour announced for the start, but a half hour was wasted by the Britishers in selecting a captain, then the word was passed around the ring that Pearson was the chief and had been lucky in the toss. Every one expected to see the Americans take the field, but they were sent to the bat, and when their opponents turned up they did so with a baker's dozen. A roar of laughter announced this mistake, and Gregg of the Girards, the old man, was consoled with the office of umpire, a position he proved himself utterly unfit to fill. The factory whistles and farm horns were sounding for twelve o'clock when G. Newhall and Morris went to the wickets opposed by the bowling of Lane (left medium round) club-house end, and Bromhead (slow round) lower end. The field, in the opening over, was placed as follows: Joe Hargrave, at the wicket; Kessler, point; Patterson, cover point; Giles, short leg; Smith, long leg; Moran, mid-on; Tyus, straight drive; Brooks, long off; T. Hargrave, slip; Bromhead, third man, and Pearson, long slip. On Lane's fourth delivery, G. Newhall was missed by Kessler at point, and in the next over from the same bowler was given out leg before. This bad start was followed by still worse luck, and it was not until R. Newhall and Law got together that the score increased. The former, after making several boundary hits to leg and the on, departed with a dozen. Law then settled down to what resulted in the largest individual score of the match. During his stay he saw eight of his companions out, and his 54, which was made up of eleven 3's, two 2's and singles, was an exhibition of good all-round cricket, combining grand defence and fine hard hitting, including one slice of luck when he had made 11. Clark, the next highest scorer, played well for his fifteen, and with the last man out the tens showed two less than a hundred. The fielding during the innings was by no means first-class, but of the five that handled the ball, Lane's magnificent bowling more than counterbalanced the poor support, as the analysis will show. Total 98.

Bromhead and Brooks, at about four p. m., took their places at the wickets, faced by the bowling of Clark (fast round), lower, and Brewster (slow round), upper end. The field at the opening was placed as follows: Van Rensselaer at the wicket, Brewster, point; Caldwell, cover point; G. Newhall, slip; R. Hargrave, long slip; Law, mid off; D. Newhall, deep long off; Morris, mid on

G. Newhall, draw; Moore, short leg, and R. Newhall, long leg. Bromhead began at once a very free innings, and had quickly secured 9, when he skied one from the slow bowler to deep square leg, which, though badly judged, was finely held by Dan Newhall. Smith followed, and with the score at 15, C. Newhall (fast-round) supplanted Clark. The new comer at once showed splendid form, and commenced to score rapidly. Brooks, however, in hitting the slow bowler to leg was beautifully caught low down by Moore at draw—Tyers came next, and both batsmen troubled the scorers until 31 was up, when D. Newhall relieved Brewster. Runs continued to come, although Moore dropped an easy one from Smith, off C. Newhall, when the batsmen had contributed 15. When the score had increased ten runs Law was handed the ball by C. Newhall, and Brewster resumed at D. Newhall's end. When time was called at five p. m. the total stood at 45, of which Smith had assisted with 16 and Tyers with 18. Both innings, however, contained a slice or two of luck.

The fielding of the American team was by no means up to the mark, and the bowling, with the exception of Law's, bad.

SECOND DAY'S PLAY.

On resuming on Thursday at twenty minutes to 11 a. m., Smith and Tyers, the two not-outs of the previous evening, resumed their places at the wickets. The former had already secured 16 and the latter 18. Law opened the bowling from the upper end and sent down a maiden to Tyers, and Brewster followed. Tyers was bowled by Law, his score marked with two 3's, two 2's and singles. W. S. Patterson, of the Cambridge University team of 1878, joined Smith. Law's sixth over was a gem, but Smith defended his wicket finely. Patterson drove the slow bowler for 1, Smith lifted him to the boundary at long off for 3, and each batsman added a single. With the score at 57, D. Newhall relieved Brewster, and in his second over tempted Smith to let out at a Yorker, which went straight to Law's hands at mid-off. His score of 27 was obtained in the best professional style, and contained four 3's and singles. The veteran Joe Hargrave partnered the Cantab, and the latter got Law beautifully to forward square leg for a triplet. The fielding thus far had been a great improvement on that of the first day, and Law particularly was bowling in grand form; nor was the batting at all behind, Patterson handling the willow in such a manner as to call forth much deserved applause, his late cutting being clean and well placed. At 69 Clark supplanted Law, and Patterson cut him prettily through the slips to the boundary. In his next over J. Hargrave hit across at a straight one, and his middle stump turned a somersault. Tom Hargrave followed, and the score slowly advanced. When Patterson had secured 16 Van Rensselaer missed him at the wicket off Clark, but avenged himself after the batsman had added 1 more to his score, by stumping him finely off the slow bowler. Patterson's stay at the wicket had been productive of 17 runs, obtained by very pretty cricket. Kessler joined T. Hargrave, and the latter was at once sharply caught behind the wicket by Van Rensselaer, off Clark. J. Pearson partnered the Staten Island favorite, who "brought down the house" by hitting the slow bowler over the ropes at square leg for 4. Brewster then took D. Newhall's end, and C. Newhall went on in place of Clark. The former only sent down one over, when D. Newhall resumed with the ball. Both batsmen got the slow bowler to leg for 3 each, and 90 was on the board. C. Newhall changed ends, and Pearson poked the ball into Caldwell's hands at forward square leg. Moran filled the vacancy, and drove the last ball of the over for a single, thus bringing the score up to a tie with the Americans' innings. Kessler added two singles, and three figures were posted. Clark then took the upper end, and Moran in attempting to drive him got under the ball and skied it over the bowler's head, where it was grandly taken by Moore, who had to run thirty yards to get it. Giles came next, and Kessler got both bowlers finely to leg for 3 and 2. At 109 Law relieved Clark; but runs continued to come, Kessler hitting freely to all parts of the field and Giles showing fine defence. At last, however, the former was too late for a ripper from Law, and retired with the good score of 26, which contained one 4, four 3's, two 2's and singles, all obtained by fine cricket. Lane, the last man, joined the New York professional, and a cheer announced his run out the next ball, leaving Giles not out 4, the general play being a grand all-round display. Total 120.

Play was resumed at fifteen minutes to two p. m., George and Charles Newhall at the bat, opposed by the bowling of Lane upper and Bromhead lower end. The former opened the score book by driving Lane finely to the off for three. Bromhead followed with a maiden, and C. Newhall got Lane to the off for a single. Bromhead sent down another maiden, and G. Newhall's middle stump fell to Lane's third delivery in the next over. Moore followed and just escaped his predecessor's fate. The next ball from Bromhead took C. Newhall's wicket, and a groan went up from the grand stand that was echoed around the ground. Law filled the vacancy only to be bowled the first ball. Brewster followed suit. This was a slaughter of the innocents, and the English stock went booming. R. Newhall went to the wicket in deathlike silence, but aroused a cheer that might have been heard in Germantown by hitting Bromhead to leg for 4. Moore then cut Lane to the ropes for 3, and R. Newhall whacked him to leg for a couple. The stand of the innings now took place; runs came fast and furious, and the tens showed 20 up. Six minutes later they were changed for 80, when Smith took Bromhead's end. Bromhead then gave R. Newhall a life by missing him badly at deep on-field off the new bowler. In Lane's next over R. Newhall hit him to long leg for 3, and placed the other bowler to same place for a single. Although the score kept increasing, the fielding was in all respects first class, Giles being very nippy, and Tyers at cover point especially distinguishing himself. It was not until the score had reached 44 that R. Newhall fell a victim to a rattling catch by Patterson at deep square leg, off Smith, after playing a rattling innings of 24, made up of one 4, one 3, four 2's and singles. Clark joined Moore, and as Lane's eleventh over yielded six runs, 50 was up. In Smith's next, however, Moore was disposed of in the same manner as R. Newhall, after hitting hard for his score of 19, which contained three 3's, one 2 and singles. R. Hargrave followed, and Smith got Clark's middle stump. Caldwell, the new comer, and his partner each added a single, when the former hit the ball into Moran's hands at mid-on. D. Newhall joined R. Hargrave, and after getting two singles T. Hargrave relieved Lane. D. Newhall drove Smith for a couple, and R. Hargrave snicked a slow one from T. Hargrave to Bromhead at slip. Morris, the eleventh man, went to the vacant wicket, and D. Newhall hit T. Hargrave to the ropes at long on for 3, and Smith to long leg for same figure. Both batsmen began

bating freely and well, punishing Smith badly to leg, and a dozen runs were added to the score before Smith got in on Morris' wicket. Van Rensselaer came last, and Lane went on at the lower end, vice Smith. The new comer hit Lane to the off for 3, D. Newhall to the same place for a couple, and then placed him to draw for a single. At 84 Bromhead took the ball from T. Hargrave, and with two more added to the score Van Rensselaer succumbed to Lane, leaving D. Newhall to carry his bat for an excellent innings of 20, in which there were three 3's, two 2's and singles. Total 86.

This left the Englishmen left 65 to make to win, but as there was only fifteen minutes before calling time at five o'clock, it was agreed to prolong the game a quarter of an hour longer. Bromhead and Lane went first to the bat, against the bowling of Law and C. Newhall, without scoring. Lane hit the ball to Brewster at mid-on. Moran came next, and after Bromhead had contributed for the former fell to a shooter from C. Newhall. Brooks followed and Law bowled Bromhead with a ripper. Smith joined Brooks and played Law's first ball on the wicket. Pearson filled the vacancy as the sun sank behind the woods, making the light very gray and difficult to play in. Brooks then got C. Newhall to long leg for 3, and Pearson drove him to the ropes for a like amount. The cheers from the English clique were deafening, but changed into a howl of dismay as Law upset Pearson's stumps the next over. The excitement became intense as Tyers partnered Brooks. Five runs more were added to the score, when time was called and the match ended in a draw. In every respect the finish was an exact counterpart of the Canadian match, and the rapid dropping of the Englishmen's wickets can be attributed solely to the fact that it is impossible to play cricket in the dark. Subjoined is the full score:

AMERICANS.		Second Innings.	
G M Newhall (Young America),	1 b w, b Lane.....	0	b Lane..... 3
Dr C Morris (Merion), run out.....	2	b Smith.....	9
J R Moore (Staten Island), b Lane.....	0	c Patterson, b Smith.....	19
R S Newhall (Young America), b Lane.....	12	c Patterson, b Smith.....	24
S Law (Merion), run out.....	54	b Bromhead.....	0
R Hargrave (Girard), b Smith.....	6	c Bromhead, b T Hargrave.....	1
C A Newhall (Young America), b Lane.....	0	b Bromhead.....	1
E W Clarke (Young America), c Mooran, b Lane.....	15	b Smith.....	0
D S Newhall (Young America), b Bromhead.....	1	not out.....	20
F E Brewster (Germantown), b Lane.....	1	b Lane.....	1
1 b w, b Lane.....	1	b Lane.....	1
R N Caldwell (Young America), c a), b Lane.....	6	c Mooran, b Smith.....	1
A Van Rensselaer (Young America), not out.....	0	b Lane.....	3
Byes, 6; leg byes, 1.....	7	Byes, 2; leg byes, 1; no ball, 1.....	4
Total.....	98	Total.....	86
ENGLISHMEN.		Second Innings.	
Bromhead, prof (Germantown), c D S Newhall, b Brewster.....	8	b Law.....	4
Brooks, prof (Girard), c Moore, b Brewster.....	2	not out.....	5
Smith, prof (Pennsauken), b Law, b D S Newhall.....	27	b Law.....	0
Tyers, prof (Chestnut Hill), b Law.....	18	not out.....	3
W S Patterson (Staten Island), at Van Rensselaer, b D S Newhall.....	17		
J Hargrave (Girard), b T Hargrave (Girard), c Van Rensselaer, b Clark.....	1		
E Kessler (Staten Island), b Law.....	6		
J Pearson (Chestnut Hill), c Caldwell, b C A Newhall.....	26		
E H Moore (St George's), c Mooran, b Clark.....	4		
Giles, prof (St George's), not out.....	1	b C A Newhall.....	0
Lane, prof (Staten Island), run out.....	4		
Bye, 1; leg byes, 3; wide, 1; no ball, 1.....	6	c Brewster, b C A Newhall.....	0
Total.....	120	Total.....	15

ENGLISHMEN.		Second Innings.	
Bromhead, prof (Germantown),	c D. S. Newhall, b Brewster.....	8	b Law..... 4
Brooks, prof (Girard),	c Moore, b Brewster.....	2	not out..... 5
Smith, prof (Penninear),	c Law, b D. S. Newhall.....	27	b Law..... 0
Tyers, prof (Chestnut Hill),	b Law.....	18	not out..... 3
W. S. Patterson (Staten Island),	c Van Rensselaer, b Clark.....	17	b Law..... 1
D. S. Newhall.....	c Kessler (Staten Island), b Law.....	26	b Law..... 3
J. Hargrave (Girard),	b Clark.....	1	b Law..... 3
Clark.....	c H. E. Kessler (Staten Island), b Law.....	6	b Law..... 3
T. Hargrave (Girard),	c E. H. Moore (St. George's), b Moore, b Clark.....	4	b C. A. Newhall..... 0
G. M. Newhall (Young America),	c Giles, prof (St. George's), not out.....	1	b Law..... 0
Law, prof (Staten Island),	run out.....	0	c Brewster, b C. A. Newhall..... 0
Bye, 1; leg byes, 3; wide, 1; no ball, 1.....	6	Total.....	15

ANALYSIS OF BOWLING.

AMERICANS—FIRST INNINGS.

E. W. Clark.....	84	19	7	3
F. E. Brewster.....	102	27	2	2
C. A. Newhall.....	97	29	5	1
D. S. Newhall.....	96	25	7	2
S. Law.....	90	14	6	2
Wide, C. A. Newhall, 1; no ball, C. A. Newhall, 1.				

SECOND INNINGS.

S. Law.....	6	2	3
C. A. Newhall.....	24	9	2

ENGLISHMEN—FIRST INNINGS.

Lane.....	144	25	10	7
Bromhead.....	65	16	4	1
Smith.....	90	27	4	1
E H Moeran	36	14	0	0
Tyers.....	24	9	1	0

SECOND INNINGS.

Lane.....	98	38	4	3
Bromhead.....	48	14	3	2
Smith.....	66	23	3	5
J. Hargrave.....	36	7	3	1
No ball, T. Hargrave.....				

RUNS AT THE FALL OF EACH WICKET.

Americans.		Englishmen.	
First Innings.....	0 0 13 17 37 44 67 89 98 98 98—98	First Innings.....	11 19 49 59 72 80 80 97 100 120 120—120
Second Innings.....	4 4 4 5 4 5 50 52 56 58 76 86—86	Second Innings.....	0 4 4 10 10 10 10 10 10 10 10—15

Umpires—Mr. O. A. Knipe, of Belmont C. C., for Americans; Mr. E. George, of Girard C. C., and Mr. Sam Welsh, Jr., of Germantown C. C., for Englishmen.

—A blind man has just astonished the world by climbing Mount Blanc. He ought to come to America and go wing-shooting on the prairies.

—Balm sleep, good digestion, rich blood, elastic step and cheerfulness in Hop Bitters.

Answers to Correspondents.

No Notice taken of Anonymous Communications.

- E. J. A., Pittsburg, Pa.—See our advertising columns for wild rice for sale.
- DAVID BONES, New York.—1. Pack the quail on ice. 2. For wild turkey use BB.
- B. S. D. N., Washington, Pa.—Your inquiry was answered in our game columns, Sept. 20.
- S. S., New York.—When is the law off quail this year in Connecticut? Ans.—Oct. 1.
- H. W. K., Deposit, N. Y.—The Bogardus cartridges are said to be safe; we have tried them with success.
- M. F.—We have no records of Monarch of the Seas. Apply at office of American Lugs, 26 Burling Slip.
- M. M. M., Ripley.—Have no records of brig Adelaide. Write to American Lugs, 26 Burling Slip, N. Y.
- J. W. P., Philadelphia.—The number containing report of archery meeting at Chicago was that of Aug. 8, 1878.
- J. G. K., New York.—You will find nothing but barnyard fowl about Loebst Valley. See another reply for duck season.
- F. N. B., Columbus, O.—Have written to learn about the pistol. For other inquiry see another answer in this issue.
- A. H., Cuero, Texas.—It is safe to shoot the 5 drs. of the black powder in the gun mentioned, provided the gun is all right.
- C. A. P.—It will not damage the canoe to let her remain in salt water for a long period, but better land her out. No great job.
- J. G. K., Indianapolis, Ind.—For a 12-bore gun in prairie chicken shooting, use No. 8s, 1 dr.; to 3½ drs., according to weight of gun.
- C. F. N., Woods Corners.—You can clean brass shells by immersing them in some weak acid—vinegar will answer—and then rubbing off.
- P., Buffalo.—No new edition yet of "Kemp's Yacht Designing," but only of his yacht and boat sailing, which deals of building small boats.
- B. G. C., New York.—The ordinary vaseline, if pure, will answer for your gun. It will not injure it, and will prevent rust. Apply with a cloth.
- D. C. A.—For 16ft. yawl boat use lug sail. Hoist, 10ft.; foot, 10ft.; head, 7ft., of which 2ft. is forward of mast; peak to yard, about 40 degrees.
- L. F. D., Cohocton.—The expansion of your brass shells is probably due to a fault of the chamber. Take the gun to a gunsmith, and have him examine it.
- G. B. C., Worcester, Mass.—1. Write to the Secretary of your State. 2. The regular brands of black powder are all reliable. 3. The kind you mention is fair.
- C. S. G.—Zinc, sheet-lead or tin; or else lay a coat of asphalt sheeting, and plank over with light stuff. Or simply double-deck with coat of tar between and caulk.
- P., Yalaha.—For boat 19ft. x 20½ x 23½ use cat rig or lug sail. Hoist 21ft., foot 21ft., head 12ft., peak to gaff 40 degrees, if a lug. The head should be 22ft. with 5ft. forward of mast.
- W. B. R., Welland, Ont.—You can use with safety the ordinary length shell, and also the long shell, in a rifle chambered for the extra long, but probably with not such good results.
- H. S.—For photos of American yachts send to Black & Co., 333 Washington st., Boston. We have some assorted English photos of all kinds on hand. Can be forwarded for 50c. a piece.
- X. Y. Z., Lockport, N. Y.—We cannot tell you where to go within thirty miles of your own town for good quail, partridge and woodcock shooting. Perhaps some of our friends can furnish the information.
- A. L. E., New York.—1. The 16-bore is pretty small; we should prefer a 12. 2. See our game reports from Long Island. 3. Long Island is governed by the State game law, with the exception of some county laws.
- D. W. H., Philadelphia, Pa.—There is no book containing just the information you want. We shall soon publish a series of articles on the subject, with special reference to the wants of just such persons as you speak of.
- G. H. W.—Small sloops can be sailed from Oceanic to Havre de Grace by outside passage around Cape May, thence to Delaware city and through Sassafras canal to Chesapeake and up the Susquehanna. No inland passage.
- C. M. C., Pittsburg, Pa.—Please inform me through your valuable paper whether woodpeckers do or do not support themselves on trees by means of their tail to some extent? Ans. Yes, the tail is employed as a partial support.
- S. S., Danbury, Conn.—1. For the general shooting mentioned, should advise a 12-bore. The choice between a 12 and a 10 is largely a matter of taste; the shooting is practically the same. 2. 3¼; a \$125 gun should stand 4 drs. powder.

H. O. Jr., New York.—1. To waterproof your shooting-coat, use following mixture: To 6 oz. hard yellow soap add 1½ pint water, and when boiling add ½ lb. patent driers and 5 lbs. boiled linseed oil. 2. The cardboard wad is equally "good."

F. R. D., New York.—There is no law that we are aware of in Westchester County prohibiting the shooting of robins after Oct. 1. The supervisors of that county can inform you. We have applied to them on the point without response.

G. F. S.—Place your steam yacht on file at Manning's Agency. We do not deal in any property. The road steamer and boat combined would be difficult to place on the market. Doubt if there would be much demand for such a combination.

J. F. J., Amesbury.—Protest cannot be entertained, as your rules specify that all protests must be made within half an hour after the race. If the judges have the jurisdiction we should anyway counsel waving the protest, as not flying the club colors in no way interfered with the sailing.

H. A., City.—The New Jersey open seasons begins as follows: Quail and pheasants, Nov. 1; woodcock, Sept. 1; rail, Sept. 1; upland plover, Aug. 1; summer duck, Sept. 1; reed birds, Aug. 15; deer, Oct. 15; squirrels, 1; rabbits, Nov. 1; black bass and pickerel are the only fishes to be caught now.

F. R. T., Pittsburg.—1. Do not know where to refer you for the rates. 2. For pigeon shooting with a 10-bore, 10lbs full choke, and 5 drs. powder, use 1½ oz. No. 7 or No. 8 shot; or No. 7 in one barrel and No. 8 in the other. 3. Wild fowl season in New York is from Sept. 1 to May 1; Long Island waters, Oct. 1 to May 1.

Mixed.—One whistle signifies to go to starboard, to do which the usual helm is ported. Two whistles means an intention to pass to port. Then starboard your helm. How your wheel goes has nothing to do with it. Some work with the helm, others opposite to it. Therefore, all signals of the rule of the road refer only to the helm leeward forward.

W. G.—Arrow belongs to Mr. Ross Winans. Is now laid up at Baltimore. Was built in 1874 by Kirby, of Ky., Westchester County, N. Y. Over all, 65½ ft.; water-line, 61½; beam, 20ft., 2in. hold, 6ft. 45in.; draft, without board, 5ft., 4in.; cubic contents to outside of plank, 3,847.51ft.; hoist about 60ft.; boom about 65ft.; gaff about 35ft.; bowsprit, outboard, about 25ft. Mischief has about 61ft. hoist.

S. S. G.—I want a good, reliable, breech-loading, double-barreled gun, choke-bored, etc., and wish to know if there is any real utility in the extension rib put upon all lately improved guns? Some call them only ugly protruberances to knock handles against, and the hole into which the rib fastens, a catch-all for dirt, etc. Ans. The extension rib is a most decided advantage. It is simply added strength.

F. K., Jr., New York.—1. Is shooting allowed Sundays in Rockland County, N. Y.? 2. Is there any kind of game to be found in Ramapo, N. J., or in any place along the line of the N. Y. L. E. and W. R. R. No further up than Sloansburg? 3. Is there any fishing to be had in the Ramapo River? 4. Are small catfish caught in ponds eatable? 1. No. 2. Ruffed grouse and in wet seasons woodcock. 3. A few pickerel and perhaps a very few trout. 4. Yes.

EXETER, Bradford, Pa.—In a successful woodcock expedition in Allegheny County, N. Y., last week, we came upon a pair of quail with a brood of young ones that could not have been out of the shell more than twenty-four hours. Do they commonly hatch so late? Ans. The hatching was a late one; very probably a second brood, or perhaps the first nest was destroyed by some accident. We have, however, seen just hatched quail from New Jersey early in November.

PLUMER, Boston.—1. Is there any objection to use an ungreased wad over the shot in a breech-loader? 2. What is the advantage of greased wads over the powder? I asked you recently what size shot to use for fall plover at 60 yds., and you said it was impossible to answer such questions; so I experimented, and found that No. 7 was the size to use, No. 8 being a little too small for late birds at that distance. Ans. 1. Better to use an ungreased wad over shot. 2. Lubricate the barrel. Your useful hints about pattern tests will be published next week.

S. C. P.—Berthon's boats are not to be had in America. They are pretty high in first cost, and with duty added would be expensive. They are also heavy for small yachts. Some of our advertisers make a folding canvas boat, which may suit your purposes. Or else, have light cedar or white pine shell built, say 8 or 9 ft. long, square stern, slight crown fore and aft to bottom, and fit with light zinc or galvanized iron air tanks under thwarts, making them life boats, even if filled. Weight, 40 lbs. No special oil stove for yachts made in America.

P. S., New York.—I have a fine Scott gun, 10 gauge, cylinder bore, chambers a 2½ inch shell. The end of the chamber is hardly perceptible to the touch. On looking through the barrels I can see a fine line. I generally use 2½ inch paper shell. I have a

number of 2½ inch brass shells. Will the use of 2½ inch shells in my gun cause poor shooting? Ans. The 2½ inch shells will probably give in ferrier shooting, but you can try it and may, perhaps, find the contrary to be the fact. It is not always possible to tell just what a gun will do under such circumstances.

CONSTANT READER.—Is there on record the weight of the largest striped bass that has been caught with a rod and reel? If so, please what is the weight? How large do these fish run? Ans. It is possible that the Cuttyhunk Club have such a record, but we have not access to it now. Norris says (p. 82): "They have been taken with a rod and line as high as forty or fifty pounds," but gives no instances, and other angling books are equally silent. We see them in Fulton Market from the middle of May to the last of June, weighing from forty to sixty pounds, and they are said to reach 100. These large fish are always females, and are caught in nets.

A. F. C., Sanbury, Pa.—I notice you mention the Wickersheiner process for preserving fish in connection with the 8½ pound trout of A. B. Shipley & Sons. Will you please describe the process? Ans. It is the invention of Prof. Wickersheiner, of Germany, and consists of a fluid which is injected into the heart of an animal, and so through its circulation. We saw it at the International Fishery Exhibition at Berlin, where he had enormous serpents which looked to be just dead, but which had been prepared for three years. Skeletons were prepared by immersion and were perfectly flexible, while the lungs of a dog could be inflated and respiration shown. The eyes of the fishes were sunken, but they were perfect otherwise. We learn that it is to be introduced into this country, and it will be invaluable for preserving such objects as crabs, spiders, etc., which after two days immersion remain flexible, so that all natural movements can be made by the limbs and mouth.

H. N. R., Boston.—In August last I spent a week at Webster Lake, Franklin, N. H., and some black bass caught had small black spots in their flesh. Saturday I took a trip again, and in those caught found them full of the specks, and cannot find any one to tell what it is. I send you small pieces in glycerine, and if you will put in "Answers to Correspondents" what they are you will oblige a number of your readers. The lake is made up from Highland Lake Andover and springs; very clear and pure water. I have read FOREST AND STREAM the past five years and have seen everything else about fish but these spots. Ans. We have placed the flesh of the fish containing these spots referred to in the hands of a microscopist, who reports that they are neither clusters of parasites nor encysted worms, but appear to be a cluster of pigment cells, and asks if the strips were taken next to the skin or deep in the muscular tissues. He finds these clusters to be border than the surrounding muscle, and about one-sixtieth of an inch in diameter, after being skinned in glycerine. To the eye, the strips of flesh with the black dots resemble the eggs of some batrachian.

FOREST AND STREAM,
A WEEKLY JOURNAL,

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Correspondence.

Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention. Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

Address.

All communications, of whatever nature, relating to the business or editorial departments of this paper must be directed simply

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east of 5th St.)

Babylon, 8.35 A.M., 3.35, 4.35, 5.35 P.M. Sundays.
9 A.M.
Col. P't & Whitestone, 7.35, 8.45, 10, 11.25 A.M.
2.35, 3.35, 4.35, 5, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M.
12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.
Flushing, 6.30, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35,
4.35, 5, 5.35, 6, 6.35, 7, 7.35, 9.15 10.45 P.M., 12.15 night.
Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.

Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M.
Rockaway Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M.
and 6.35 P.M.
Great Neck, 6.30, 7.35, 11.35 A.M., 4.35, 5.35, 6.35 P.M.
Saturday nights, 12.15. Sundays, 9.35 A.M., 5.35 P.M.

Garden City, Queens and Hempstead, 8, 10 A.M., 1.35, 3.35, 4.35, 5.35, 6.35 P.M. From Flatbush av. daily, except Sunday, and from Hunter's Point, Monday, Wed., Fri. and Saturday, 12.15 night.

Wednesdays and Sundays only from Flatbush av.
10 P.M. Sunday, 9 A.M., 1.35, 6.35 P.M.
Glen Cove, Locust Valley, Glen Head and Ros-
lyn, 8, 10 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Sundays, 9
A.M., 6.35 P.M.

Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M.

Port Jefferson, 10 A.M., 4.35 P.M. Sundays, 9 A.M.
Patchogue, 8.35 A.M., 4.35, 5.35 P.M. Sundays, 9
A.M.
Richmond Hill, Glendale, 8.35, 11 A.M., 3.35, 4.35
5.35, 6, 7 P.M. Monday, Wednesday, Friday and
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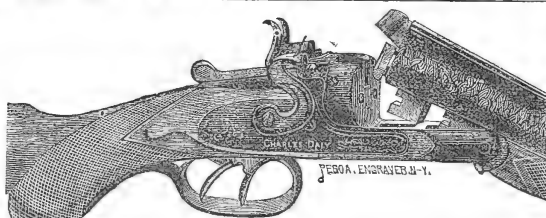
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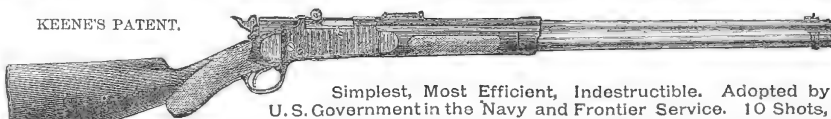
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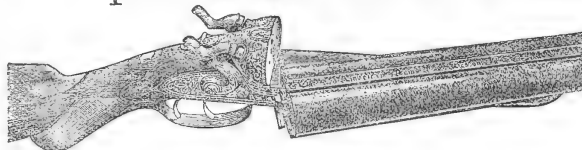
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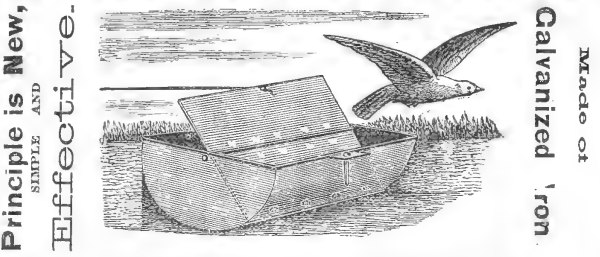
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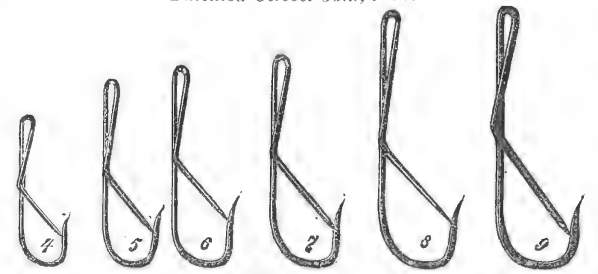
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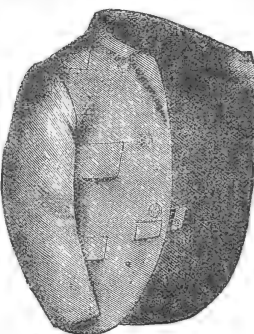
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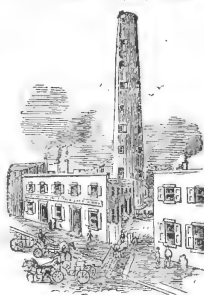
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ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

(Entered According to Act of Congress, in the year 1875, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington.)

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FOREST AND STREAM.

NEW YORK, THURSDAY, OCTOBER 21, 1880.

A LIVE PAPER.—In the last numbers of the *FOREST AND STREAM* were published communications and notes from more than eighty correspondents; and the "Answers" columns contained replies to forty-six others—a total of more than 126. These writers represented twenty-four different States and Territories, besides two foreign countries. The same issue contained the advertisements of 175 advertisers, representing an aggregate capital of many millions of dollars.

In the number and character of the contributions of its friends the *FOREST AND STREAM* is altogether unprecedented in American journalism. We are publishing a live paper, every week, and fifty-two weeks in the year.

Appreciating the continued courtesy of our friends, we cordially invite each one who can add to the general store to send in his quota.

FISHING FOR COUNT.—We have spoken in no uncertain tone upon several occasions of the destructive practice of killing small fish for the purpose of swelling the count. We intend to keep at it until the whole body of anglers join in the chorus and cry "shame" on the man who is guilty of it. The review of the report of the New Hampshire Fish Commission, in another column, contains something which all gentlemen anglers should read to every hog fisherman that they may happen to know.

GO AND SEE THEM.—In a little inclosure in front of the Merchant's Hotel in Cortlandt street are to be seen two quails, a sora rail and a gray squirrel. They are all in good condition, fat and lively, and seem to agree together excellently.

HOW THEY DO IT IN BLOOMFIELD.

BLOOMFIELD is a little New Jersey village not very far from Newark, and if the reports which reach us are authentic, we do not hesitate to say that it will be a favorite resort for quail from this time forth. Certainly if these birds could read the *FOREST AND STREAM* they would gather there in great numbers after they learned about Squire Hall and his Daniel-like decisions.

It appears that not long ago a certain Mr. Van Tassel, of the above-mentioned town, discovered not far from the railroad depot a little bevy of quail. These innocent birds, well knowing that the close time in New Jersey had not yet expired, and on that account suspecting no evil, made no effort at flight or concealment, but quietly went about their ordinary avocations and fed along as usual. The sight of the bevy was too much for Mr. Van Tassel, however. He at once went for his gun, determined to secure those quail. No dog was required. The shooter knew a trick that quite casts in the shade the ordinary methods of sportsmen. He walked up to the unsuspecting birds, quietly herded them until they were well huddled, and then, giving them both barrels, secured ten.

So far all was well. Matters had gone admirably for Mr. Van Tassel, if not for the birds, and the "sportsman" had already begun to consider the language in which he should announce his fine "sport" to his comrades, when the game constable appeared on the scene. Mr. Van Tassel was at once hauled before Squire Wm. R. Hall, and was promptly fined \$15 per bird and costs. He, however, appealed to the January Term of the Court on the main question, paying the costs then and there. We trust that there is no doubt but the higher Court will confirm the Justice's decision; but even if it should not do so, we presume that Mr. Van Tassel will consider that his fracture of the law has cost him more than it was worth, and that his birds were dear.

Some people in Bloomfield manage to get their birds out of season at a less price than \$15 each. Thus Mr. Cadmus, going out with a dog, killed a quail, and appearing before Squire Hall complained of himself, paid his fine of \$15 and received the informant's half—\$7.50.

This is the way they do things in Bloomfield, and a most excellent way it is. We wish that a little of the same spirit could be infused into a number of other localities that we could name, and indeed throughout the country.

We are reliably informed that an individual, whose name we have, recently killed two quail near Newark, N. J., and exhibited them to sportsmen of that city. Is not this a case for the Essex Gun Club to take hold of?

THE NEW YORK GAME LAW.

ON another page will be found the admirable analysis of the New York game law, prepared by Abel Crook, Esq., president of the New York State Association for the Protection of Fish and Game, and read before the last meeting of the Long Island Sportsmen's Association. This synopsis was made to show what the provisions of the law are at present, and also to serve as a basis for intelligent work in amending the law where it needs amendment, and of framing it in such a way that every one may understand it. It is published in the *FOREST AND STREAM* for these purposes. At the coming session of the Legislature at Albany, the Standing Committee of the State Association propose to present a new game law, and in order to frame one which shall meet the approval of sportsmen throughout the State upon every point of its provisions, it is desired to hear the views of all who are interested. The readers of *FOREST AND STREAM* are called upon to study the law as it now stands, and if they have any suggestions to offer regarding any portion of it they are requested to write the same to the committee in charge at an early day, addressing all communications to Abel Crook, Esq., No. 99 Nassau street, New York city.

It is particularly requested that those who wish changes made should furnish facts to substantiate their arguments. The committee want the actual experience of practical men on these points. Having all the facts before them they can intelligently proceed in their work.

This is a most sensible way of setting about the task. The opportunity is now offered to every man to put in his

views on any particular point of the law. Let each one improve the occasion to speak, or forever after hold his peace. There is no good reason why the New York game law presented at Albany next winter should not embody the collective wisdom of the sportsmen of the whole Empire State, and be therefore free from cavil.

The committee of the Long Island Sportsmen's Association, who will consider the law with reference to Long Island and suggest any needed changes or special provisions required for that section, are Messrs. Geo. A. Clappell, Dr. Henry F. Aten, Dr. Wm. Wynn, Abel Crook, Austin Appleyard, Judge Henry S. Lott, Chas. W. Havemeyer, Sam. S. Conant and Henry Altenbrand. It is hoped that other game protective clubs throughout the State may appoint similar committees to discuss the law and report in the same way.

The Standing Committee of the State Association, who will prepare the law, are: Abel Crook, Robert Robinson and Henry Altenbrand, of Brooklyn; J. H. Williams, Dansville; Jacob Witmer, Niagara Falls; and Henry H. Morse, of Rochester.

Mr. Crook, who has had much experience in framing laws, proposes to make the new game law a model of brevity and clearness. It will be substantially (1st) a legal definition or construction of the words "close season," (2d) the provision of a "close season" for the specific birds, animals and fishes, (3d) the exceptions, (4th) miscellaneous provisions, (5th) uniform penalties, (6th) machinery for prosecution.

The officers of the New York State Association for the Protection of Fish and Game, and the Long Island Sportsmen's Association, who have charge of the next convention, are deserving of the highest commendation for inaugurating a new order of things and making the society what its name implies that it should be. Their course will be cordially indorsed by the sportsmen of the State, and many of those who have lost their interest in the society and held aloof from its conventions will now accord to it their strongest support. Believing that we voice the sentiments of the entire sportsmen's community we hasten to congratulate the promoters of this new movement, and to bespeak for them a complete success in their efforts.

SOUTHWARD.

WITH the approach of winter weather those sportsmen who annually spend a winter at the South are already turning their thoughts thither and preparing for the campaign. From our correspondence we infer that Florida will be this year, as heretofore, the resort of the majority of Southern tourists. As is usual at this season of the year the *FOREST AND STREAM* is in receipt of numerous inquiries for the best shooting and fishing localities; inquiries which year by year it is more difficult to answer.

The day has almost passed away—we shall rejoice to see it wholly gone—when game can be butchered from the deck of a river steamer. Every Florida visitor must be familiar with the savages hailing from Northern cities, who stand on the steamer's deck as she makes her way up the stream, and blaze away, right and left, before and behind, at every living creature on the banks—birds, beasts and reptiles. There is less of this disgraceful business now than there was once, but this is due rather to a decrease in the supply of game than to any diminishing of the hordes of butchers or abatement of their murderous craving for blood. And just here we may throw out a hint to the owners of the vast herds of wild cattle which roam through the Florida woods. Bye-and-bye, when game becomes so scarce that the being clothed in velveteens and brass buttons, bearing a gun and with it the general appearance of a rowdy, cannot satisfy his appetite for gore in the old way, he will turn his attention to your herds, and shoot down your defenseless cattle, until they too are exterminated. So will the price of Florida beef go up, and the famine thereof be ascribed to the political administration.

The man who seeks in the South pleasure and health, and who is contented with the legitimate pursuit of fish and game will still find abundant shooting territory in Florida, provided he turns aside from the guide book routes and leaves the regular circuit of the multitude. The southern and south-western portions of the State are supplied with a fauna which will well repay the journey thither. We have on hand a variety of letters relating to the different sections of

this sporting country, and these will be published at an early date.

While Florida stands first as a winter sporting resort, possibly because it has been so much talked of, there are many other sections equally as attractive and equally rich in game. In the North and South Carolinas, Georgia, Alabama, Arkansas, Louisiana, Texas and in short throughout the whole South, are vast tracts where game is abundant, and where the sportsman tourist may find not only the best of sport but a hearty welcome among a hospitable people as well. The rod and gun are passports to good fellowship the world over, and no one feature of a journal like the FOREST AND STREAM is more significant than its chronicles of the warm reception accorded by the people of one section to their guests from other sections.

REPORT OF THE NEW HAMPSHIRE FISH COMMISSION.

THE report of the New Hampshire Fish Commission for 1880 opens with the statement that salmon culture in the Penigewassett has been a grand success, and that they have taken over 100,000 eggs from fish which had been artificially hatched from eggs taken from the Penobscot River and planted in the Penigewassett, and which had passed up the fishways over the dams at Lowell, Lawrence and Amoskeag. This is indeed a grand success, as the fish are proved not only to live, but have returned to their native streams to breed. The Commissioners are inclined to think that the twenty-two fish taken at Plymouth represent the planting of three different years—1872, '73 and '75—as their weights varied from eight to twenty pounds; while one which passed their nets was found below Livermore Falls with several of his ribs crushed in and broken away from the backbone—probably in attempting to ascend the falls—which weighed twenty-eight pounds, and might have been a survivor of earlier attempts at stocking the river.

Brook trout have been distributed to many streams, and an increased number are expected this year. Land-locked salmon eggs have been received to the number of 67,000 as their share of the crop of the joint stock establishment at Grand Lake Stream, in Maine.

The observations at the Lawrence fishway from May 5 to November 1 are interesting. No fish were seen until May 9, when two "suckers" (*Catostomus*), and one brook trout were noticed; and on the 12th, alewives, suckers and two lampreys were seen, and these increased and decreased each day until June 2, when the record says: "Alewives and suckers run very large; a few lampreys and three salmon, ten to twelve pounds." (Why cannot our Commissioners set the example of a proper nomenclature, and not call a lamprey a "lampre-eel," when it is not an eel at all, nor even distantly related to it?) On the 5th "one shad" is added to the previous list, and a black bass also appears; while the alewives, suckers, "chubs," etc., keep right along, interspersed with an occasional salmon, until the 30th, when no salmon are recorded until August 27, and again on October 3, making about thirty seen during the season.

Commissioner Powers reports to Mr. Brackett, of Mass., that 367,500 California salmon fry were distributed in January as follows: 25,000 to the Contoocook River; 28,000 in Salmon Falls River; and the remainder in the Penigewassett, and that they could be seen until last August anywhere in the river near the hatching-house, and were then from three to five inches long, and very lively and apparently healthy. Twenty-two Atlantic salmon (*S. salar*) were taken during the season, weighing from eight to twenty pounds each, thirteen of them being females, yielding together over 100,000 eggs. Mr. Powers further says: "For over thirty years not a salmon passed up the Penigewassett. This is the first time—in this country, at least—where any considerable quantity of eggs have been taken from mature salmon caught from a depleted river artificially restocked. The result cannot fail to be highly gratifying to those who have, or have had, the matter in charge, and has, to a certainty, demonstrated the faith of the few who argued that the rivers could be restocked to advantage was well founded. Those who have believed it impossible must now be convinced that it is not only possible but quite practicable."

Two thousand eggs of the California "mountain trout" (*Salmo irideus*) were received from Prof. Baird and were hatched. What the Commissioners say about fishing for trout is so plain and to the point that we gladly give it entire. They say: "We must repeat what we have said before, that the depopulation of our brooks is largely owing to the persistent capture of the yearling fish, from two to three inches long, before they are old enough to reproduce their species, by the cockney fishermen and careless boys, who aim at getting the largest number possible, and either say, 'Every one counts,' or, 'the small fish are the sweetest.' Possibly they are to any one who is fond of salt pork, for these little yearling trout taste of very little else when cooked, the small proportion of fish flavor being entirely overwhelmed by the larger ratio of the 'essence of hog.' It may be the affinity between the bipped and the quadruped which accounts for this taste."

It is interesting to note that attention is being paid to the migration of lampreys, which are largely eaten in New Hampshire and some neighboring States, but which are rejected as food in New York. The report says that this fish "came up the Merrimack as far as Lowell, and Messrs. George Liddle and J. L. Stevens, of Manchester, made two trips to Lawrence

and procured several hundred, which they placed above the Amoskeag dam. They propose to repeat this work next month, so that we may reasonably expect to see these fish back in numbers in a year or two, though perhaps not in such quantities as when they obtained the title of 'Derryfield beef.'" An appendix contains an address delivered before the Fish and Game League, April 6, 1880, by ex-Gov. B. F. Prescott, in which he advocates fishways and protection. A list of the lakes and ponds in the State closes the report.

BLUE-FISHING ABOUT LONG ISLAND.—Of all times in the year the bluefish is usually at its best in October and November, and the present season is as good as in any previous year. Last week the catches were plentiful all around Long Island, and we have no doubt of their being as good in other waters, but we personally know that they were excellent off Fire Island, Gardiner's Island and Long Island Sound, some "fifteen pounders" having been captured in Plum Gut. Not only is this fish, which east of New Jersey is a "blue fish" and south of there a "tailor," exceedingly plentiful now, as it has been all summer, but this is the season for the large ones to come in, and they are in the very best condition attained by this excellent and gamey fish. New Yorkers can now take Long Island Railroad at either Flatbush avenue, Brooklyn, via the down-town ferries, or by Thirty-fourth street ferry to Greenpoint, and in a few hours are landed in any part of the Island they may wish to visit, as the road branches in all directions. Smaller fish are found in Great South Bay, but the large ones seldom enter, and are caught just outside the inlet; and as the bay is shallow and full of "weed" those fishing inside must take their fish by clumming, which, by the way, is the most sportsmanlike; but if you prefer the sail with a trolling snag then outside is the proper place. The bluefish is so savage and voracious that the smaller ones never care for the company of their larger relatives, hence a school will usually contain fish of nearly one size, and when taking "three-pounders" it is seldom that one of twice that size is struck. It is a notable fact that while the other food fishes are decreasing in numbers the bluefish, *Pomatomus saltatrix*, is really increasing, and fifty years ago it was unknown on our shores.

PENNSYLVANIA FIELD TRIALS.—The arrangements for these trials are now completed, they will be run at the terminus of the Quarryville R. R., which is about fifteen miles south-east of Lancaster, in Lancaster County. The grounds have been preserved for several years and are very abundant, besides birds will be on hand for stocking should there not be a sufficient number found on the grounds. The entries to the trials made to the secretary are reported to be nearly full.

The Sportsman Tourist

"HO FOR THE MAGANETTIVIAN!"

WE hereabouts are persistent fishermen—not a bass in Fall Creek or White River that is not acquainted with us by sight; but I doubt that Indianapolis will ever become a fishing resort. A year ago I announced that I would never again wet a line in Indiana; of course I have broken the resolution. When my neighbor does not care to go and ask me if I "have any sand," I am likely to say that I have, and in an hour or so I am basking in the sun in the neighborhood of Broad Ripple, hoping for a bass, expecting a goggle-eye and hauling in a small sunfish. Along in the spring my eye was riveted by a well-written advertisement in FOREST AND STREAM, headed "Ho for Maganettivian!" I consulted "Hallock's Gazetteer," and that settled it. On the 7th of July I was on the way to Toronto. It is a question what is the proper number constituting a party for fishing. I have spent a great deal of time in organizing expeditions; I have begun early in the spring to agitate the question and to fire the hearts of my friends. I have now and again succeeded in making up a party of four and even six; but it is an uncertain world, fishing is uncertain, fishermen are uncertain and also the wives of fishermen. It is a sickening thing to set the day, make all things ready and find that the elect gentlemen have had a change of mind. A party of one can be depended upon: so it was that I sat lonely at the Queen's Hotel, Toronto, and mused on Muskoka and the regions beyond.

Mr. McGraw, manager of said hotel, is a fisherman's friend; he introduced me to Mr. J. M., a gentleman well known to theatre-going people, and J. M. and I "pooled our issues," bought a "phantom minnow," and made for the north. The latter part of the day's journey by steubout to Rosseau is pleasant. We passed several camps, the most noticeable of which was that of the "Solid Comfort Club." We were forewarned that Mr. Pratt, the proprietor of the Rosseau House, is peculiar; undoubtedly he is. He is neither childlike nor bland in manner, but after a two weeks stay with him we decided that no man in Ontario could have done more to make the days pleasant. Having paid my bill I felt free to say that the hotel is excellent, and I know of no place where the summer sunnier gets more for his money. Others have said that the fishing is superb, and I believe that is the word.

The fish are not yellow nor striped nor silver, but black bass, and die game. We failed in fly-fishing and fell into the custom of the country and used the old-fashioned, reliable anglet worm. It is a trifle nasty, but it does the business. The Toronto worm is the thing. The home crop of worms is scant. Sand and rock is not the proper environment for a worm—he runs too much to skin, although in one corner of Mr. Pratt's garden there is a preserve where the worms are tolerably fat; but discontinue them by daylight is attended with considerable risk unless in the absence of the proprietor. The fishing (of the kind) leaves nothing to be desired. The boats are excellent, the boatmen expert. There is no use in stating the number of fish that Webster, our boatman, brought in night after night as I desire when I write anything to be believed. There is a variety of lakes to visit, enough to consume the days, and at evening one can sit and hear Angus Morrison, M. P., tell muscledown stories, see the landlady welcome his guests, and at night sleep undisturbed by mosquito or—

The weather was perfect—the monotony was broken by fine thunder-storms—the aforesaid advertisement, "Ho for Maganettivian!" clipped from your paper, was in my pocket, and, my object being trout, I took the stage for the famous river. The road is "Adams' Road and not McAdams." It has been cursed a good deal by the profane passengers, but for a road that leads to fishing it is uncommonly good. Trout and turkeys are not usually in conjunction, unless they be trout raised by machinery and fed on liver. Clark's at Maganettivian Village is a hospitable inn. The Maganettivian is a noble river, but dipping my hand in it settled the trout question. The water in July and August is too warm. May, June and September are the months in which to fish for what I believe some one has termed "speckled beauties."

For a day or two I turned my attention to bass with good success. There are deer in this region. July is a little early to kill deer legally, but in a region where the people are so poor as they are in Muskoka the law is lenient.

When a man has to put a palisade around his cabbage bed to keep the deer out, and has had no meat in the house for seven weeks, to look upon a quarter of venison does not make him angry. Partridges were also abundant, and I have no doubt, more easily digested than bacon. I could only regret that it was the close season for game. My friend, Geo. Ross, can in the proper season show a visitor living moose within two days' journey from Maganettivian. I know of no game region so accessible and so certain to be satisfactory as this. Mr. Clerk or Mr. Geo. Ross will be pleased to put any sportsman who wishes to visit the Maganettivian on the track. Mr. Ross has bonnets, tents, boats, blankets and a perfect knowledge of the country.

Muskoka is free land given to the settlers by the government, taxatable for twenty-one years, and not liable for debt. I am sorry that the land is, so much of it, undissolved rock. The people are poor and kind, hospitable in the extreme, and a little money will go a great ways. Any sportsman not a "tender-foot" cannot fail to remember pleasantly his sojourn in this region. Depending on chance acquaintance for company, I have had remarkable good fortune.

Returning to Pratt's, at Rosseau, the bass were still biting, but I left J. M. fishing in twenty feet of water for his elegant rod and reel, inadvertently dropped overboard. There was no sport in that. So, Mr. Editor, I am glad on the whole that my eye rested on the "Ho for the Maganettivian!" and can only suggest that the advertisement be made large enough to state that July and August are not the months for trout.

Indianapolis, Ind.

M. W. R.

Natural History.

NOTES ON SOME MARINE INVERTEBRATES.

IN a recent number of the *American Journal of Science*, Prof. A. E. Verrill gives us some very interesting notes of his observations on several marine forms, made during the past summer at Newport, R. I.

Prof. Verrill spent a portion of the summer at Newport in connection with his work on the U. S. Fish Commission, and the discoveries referred to will, no doubt, be published more in detail in the Fish Commission Report of last summer's work. Perhaps the most interesting of these observations is that of the occurrence at Newport of two littoral species of European shells which have not before been recorded as American. These are *Truncatella truncatula* and *Aequidonta grayana*. During the latter part of July and in August numerous specimens of both species were found living among the decaying seaweed at highwater mark on the docks at Newport. Both young and full grown shells were found here. The two species were associated with a number of well known North American genera, such as *Alicia*, *Auricula*, *Cherax*, *Ligia*, *Orchestoidea* and other littoral species. It cannot at present be decided whether these shells have been introduced at Newport by shipping, or whether they are really indigenous and have hitherto been overlooked. At all events, the opinion is expressed that they are now well established inhabitants of our shores.

The diffusion of the little shell *Littorina littorea* has been noticed before in these columns, and to what has been said by our correspondents Prof. Verrill adds some interesting facts. It is known that this common European species appeared first on the coast of Maine in 1868, though Dr. Dawson has stated that he had collected it at a much earlier date on the shores of Nova Scotia. In 1872 the United States Fish Commission found it abundant at Saco, Maine, and it was collected sparingly at Penikese Island in Casco Bay. In 1872 it was rare at Provincetown, Mass., but in 1875 had become common. Prof. Verrill found it abundant at Barnstable, on the shores of Cape Cod Bay. At Wood's Hole, on the southern shores of Cape Cod, only two specimens were found in 1875, but in 1876 it was common there, and is now very abundant. During last winter Prof. S. I. Smith found the first specimen detected as far West as New Haven, and since then other specimens have been taken there by Mr. E. A. Andrews and by Mr. J. H. Emerton. It is now very abundant at Newport.

Ciona cellata is another invertebrate which Prof. Verrill found abundant at Newport. This large and beautiful ascidian is to be found on rocks and on the piles of wharves at low water, and on dead shells to a depth of twenty fathoms. It would seem to be very local in its distribution, for Prof. Verrill has never found it at any other locality on our coast. This species grows to a length of four or five inches, and is about an inch in diameter. It is quite translucent, and the internal organs may be seen through the pale greenish or yellowish white test. The apertures are surrounded by a circle of bright lemon yellow, and the ocelli are bright red. This species is said by Binney to have been first found by Agassiz at New Bedford, Mass., and by him named *Ascidia cellata*. It is figured in Gould's *Invert. of Mass.*, but not described.

TEMPERATURE AND RAINFALL LAWS FOR LONDON.—An interesting paper, read at the last meeting of the British Association for the Advancement of Science, attempts to answer the question: Is there to be found any definite relation between extremes of rainfall or temperature in any month or season and the weather or temperature of the month or season next following? The author, H. Courtenay Fox, M. R. C. S., bases his conclusions on data obtained from an examination of the observations on monthly temperature and rainfall, as recorded at the Royal Observatory during the sixty-six years from 1815 to 1880. As a result of his investigation he lays down the following definite propositions:

1. A cold spring is very prone to be followed by a cold summer, a cold summer tends to be followed by a cold autumn, and a cold autumn has a slight tendency to be succeeded by a winter of low temperature.
2. Warm summers are generally followed by warm autumns.
3. In no fewer than eight out of the twelve months (that is in every one except February, March, May and October) very low temperature tends to be prolonged into the succeeding month.
4. If June, July, August or December be warm, the next month will probably be a warm one also.
5. Two months (June and July) tend, when very dry, to be followed by dry ones. On the other hand, a dry August indicates the probability of a wet September.
6. A wet December is apt to be succeeded by a wet January.

Besides the foregoing, there are a few instances in which the rainfall of certain months appears to bear a definite relation to antecedent or subsequent extremes of temperature.

7. If August or September be warm, the ensuing September or October inclines to be wet. If, on the other hand, September or November be cold, the succeeding October or December is likely to be a dry month.
8. If February, June or July be very dry, the next month has a strong tendency to be warm.
9. If January, March or April be wet, we may also expect the next month to be a warm one. But a wet May or July gives a strong probability of cold weather in June or August respectively.

SHARKS SWALLOW THEIR YOUNG.—A short time ago Mr. Blackford of Fulton Market, New York, received a specimen of the "porbeagle," or mackerel shark, *Isurus delicatulus* which was caught near Great Neck, Long Island, and proved to be a female which measured six feet eleven inches in length. Mr. Blackford said:

"When I received her she had been dead more than seven hours. From the immense size of her stomach I thought she must have swallowed a barrel or two of moss bunnies, and to gratify my curiosity I opened her. Imagine my surprise. When instead of moss bunnies I found ten little sharks, evidently her offspring, and all just the same size—exactly two feet long. I should say they were about six months old, for a young shark when hatched from the egg measures about four inches. There was no mark upon them as if digestion had begun."

The question was raised whether they were taken in for food or for protection. If, however, they were taken as food one redeeming quality can be placed to the account of sharks.

FLINT'S FIELD NOTES.—Warrenton, Va., Oct. 11.—Editor *Forest and Stream*: I give you the following memoranda from my note-book:

1880. April 23. Hunted over our "snipe ground;" no snipe birds all day.

April 27—Saw Baltimore oriole for first time; saw Aspen oriole on 24th inst.

April 28—Reliable informant saw yesterday twelve English mocking-birds in a flock; says they raise there in great numbers every year, building in large thorn bushes; think they had just returned from South. Saw to-day the first catbird of the season.

Oct. 9—Caught with hook and line, in Rappahannock River, twenty-old carp and chub; carp about one-half pound weight and full-grown. Do fish under favorable circumstances—open winter, etc.—spawn twice in twelve months. An "old fisherman" tells me the advanced condition of these spawners indicate an open winter; says "jackfish" shed their teeth every moon; they bite best on the dark of the moon; has occasionally caught them on the light of the moon, when their gills were red and showed recent shedding of the teeth. In cleaning the "carp" discovered two small parasites clinging to the tongue; thought they were diminutive leeches, until reading *FOREST AND STREAM* of 7th inst. What were they?

In July, while fishing in the Shenandoah for bass, took in a sucker floating belly up. When turned over back presented appearance of decomposition and escape of gas. (Closer inspection showed a multitude of slippery, gelatinous-looking parasites, wriggling about like diminutive crabs; fish was plump and recently dead. What were these wrigglers?

The article in *FOREST AND STREAM* on "Frogs Capturing German Carp" recalled the fact that when a boy I caught a large water or bull-frog which was in the act of swallowing a smaller "brother." The legs sticking out of the corners of his mouth gave me the idea of his being a "horned frog," of which I had read, but never seen.

In July, 1884, in Dinwiddie County, Virginia, I witnessed the attempt of a black snake to swallow a garter snake of equal size, which he had captured and killed by constriction. I could hear the bones crack in the deadly embrace. My companion spit tobacco juice in the black snake's mouth and caused him to eject his anticipated *bon bonche*, and then killed the black snake.

FLINT.

It is doubtful if any individual fish spawns more than once a year, although some species which spawn in summer are so irregular as to appear to do so. The cyprinoids (carp-like fishes) spawn from May to September, and even cover a longer period in some localities. It is possible that your fish,

for some reason, did not spawn early, and that, developing so late, it might be checked by cold weather. Carp do not grow in cool weather, and so spawn partly developed might be checked. Your "carp" was probably uncolored gold fish and not the true carp which have lately been brought from Germany and bred in Washington for distribution. It is impossible to say what the parasites were from the description, and if we had them we could perhaps only give you a long technical name of more or less jaw-twisting capacity. The best plan is to study the habits and structure of such parasites, and then you will know all that is known of them, which is very little, except the systematic cognomen.

EXPERIMENTING WITH SNAKE POISON.—The following dispatch to the *Herald* contains information which, if authentic, is of very high importance, and further information on the subject will be anxiously looked for:

Rio Janeiro, Sept. 14, 1880.

There was some excitement and much talk about the scientific enthusiasm of Dr. Stradling, surgeon on board the Royal Mail Company's steamer *Eldre*, who had horrified the crew and passengers of that vessel by testing upon himself the efficacy of an antidote for snake bite which he had discovered. At Bahia he succeeded in purchasing a large rattlesnake, which he conveyed on board surreptitiously, and, locking himself up in his cabin, deliberately made the snake bite him, with the result that he was found, some twelve hours later, in a state of coma, from which, however, he was recovered without much difficulty, and declares that, for many hours the venom had been without effect upon him. Being remonstrated with by the Captain, Dr. Stradling promised "not to do it again." But it was too much for him, and at Rio Janeiro he went ashore one evening, leaving a letter to the effect that he "was going ashore to try his antidote, so as not to break his promise (in the letter, at all events); that he felt confident of success, but that they would know what had become of him in case he failed to return," etc. Of course this letter caused his friends much anxiety till, next morning, when, just as they were sending off to the police, Dr. Stradling appeared, "radiant," showing a fresh bite on his arm, and declaring the experiment to be entirely successful, although he would not tell in what consisted the specific so marvelously effective. Dr. Stradling has been employed as surgeon of Royal mail steamers for some time, and has given particular attention to the study of the various reptiles found in Brazil, but had never previously carried his devotion to science so far. He is much respected by his shipmates and by passengers on his steamer as a clever and scientific physician, and his loss would have been much regretted. The knowledge gained by him may be very valuable to others, and Dr. Stradling declares his intention of publishing his discovery as soon as he reaches England.

A TAME DEER.—Some quite interesting facts in relation to the domestication of deer have just come under my notice.

The prominent angler of Marinette, Wis., Mr. A. C. Merryman, some two years since secured from an Indian a young doe fawn, which he sent to Mr. J. A. Asher, the Superintendent of the Hamilton & Merryman Co. farm that is located forty-five miles from Marinette, in the forest of the Michigan Peninsula.

The fawn became a great favorite, and was allowed full liberty, notwithstanding the clearing was frequented by wild deer, hunters and Indians. A strap carrying a small bell was attached to her neck, and this fully protected her during the first season.

She remained at will, sometimes absent for days together, but returning to her civilized protectors, manifesting great delight for all attention. She is now two years of age, and is the mother of two beautiful fawns.

The bell that has saved her life among the Indians and hunters had no terror for her wild companions, as these fawns were sired by an untamed father. On one occasion an Indian came to the farm bringing a saddle of venison with him to sell, and trotting behind him came the doe from the woods. The Indian had killed the deer while it was in company with the doe, and she had stood by while he was dressing it, and then followed him to the clearing.

A STRANGE FOSTER MOTHER.—Belleville, October 11.—Editor *Forest and Stream*: Under the heading of "Tame Quail" in your last issue, I notice an article by "Luton," in which he tells of three quail being found with a flock of tame turkeys. I can tell of a similar incident, perhaps still more remarkable. My brother-in-law, living near Centerville, Ill., had a turkey hen which made her nest in a ravine not far from the house. A very heavy rain having fallen, so flooded the ravine as to wash out the old turkey hen's nest. She wandered about for a day or two desolately, and then disappeared altogether, coming back occasionally to feed. The family supposed she had made another nest, and was again laying.

What was their astonishment to see her come to the house with thirteen little quail! She must have found a quail's nest in her wanderings, and deliberately sat on the eggs and hatched them. The young quail seemed perfectly satisfied, and were getting along very nicely, but were carried off by hawks, one by one, until all were gone.

DOUGLASS.

A GOOD WORD FOR THE SPARROWS.—I send you by this mail a lot of leaves of the maple growing in front of my office, which when gathered were literally covered with lice. What attracted my attention to them was the busy action of some two dozen English sparrows, hopping here and there in the tree, peering under the leaves, and savagely feeding on something. An inspection revealed the cause of their eagerness, and the cause of the early shedding of the leaves. Examined these vermin and tell us what they are. The sparrows were so busy they would scarcely keep out of the reach of my hand. I called the attention of several gentlemen, who watched them for some time. This proves (to me) the insectivorous habits of the English sparrow. In the office yard, every season, a pair of robins (*Turdus migratorius*), the little brown vireo and at least two dozen pairs of English sparrows build, and raise their broods without any fighting. The only occasion when a "rumple" is made is between the cocks when the nesting season arrives. I have counted as many as ten cocks around a single hen, fussing, fighting and "carrying on" at a rate enough to deafen any one.

The insects sent are apparently the ordinary Aphides, or "plant lice," so injurious to green-house plants.

PLEW AGAINST THE LIGHT.—Stopping at our mutual friend, John Kridler's, this morning, I was shown a large quantity of warblers and other birds that had been sent him by the light-

house keeper at Atlantic City, N. J. They were found at the base of the tower, having flown against the light in a nightly migration during a late storm. They comprised the following varieties: Blue-winged yellowbacks, indigo birds or blue linnets, black-throated blues, red-eyed vireos, red start, black poll warblers, Connecticut warblers, black and white creepers, olive-black thrushes, Maryland yellow-throats, yellow-rumps and magnum warblers. This was doubtless the great Southern migration which takes place every autumn. During the fall, about four years since, the wife of the keeper of the same lighthouse caught alive several brant which, during the prevalence of a fog, had entangled themselves in the grating protecting the light. These birds are now alive, one of them, I think, having been presented to the Zoological Garden at Philadelphia.

Hosio.

ROBBING THE FISH HAWK.—Haltmore, Oct. 4, 1880.—While on a fishing trip down the Gunpowder River a few days ago, we witnessed an interesting sight. A fish hawk that was hovering over the water suddenly made a plunge, and arose with a large taylor in his talons. He sailed leisurely over the land toward a dead tree near the shore, doubtless thinking he would have a nice meal. Just as he neared the tree to alight a large eagle came soaring down upon him, and with one swoop made him drop the fish. The eagle darted after the fish and caught it before it reached the ground, and flew away to enjoy his stolen sweets.

E. A. R.

Sea and River Fishing.

—Address all communications to "Forest and Stream Publishing Company, New York."

FISH IN SEASON IN OCTOBER.

FRESH WATER.

Grayling, <i>Thymallus teleostei</i> .	Black Bass, <i>Micropogonias</i> .
Shad, <i>Alosa sapidissima</i> .	Rock Bass, <i>Ambloplites</i> . (Two species).
Pickering, <i>Esox reticulatus</i> .	Striped Bass, <i>Morone saxatilis</i> .
Pike or Pickerel, <i>Esox lucius</i> .	Crabs, <i>Decapoda</i> .
Pike-perch, (small-eye) pike, <i>Esox americanus</i> .	Bachelor, <i>Pomoxys annularis</i> .
White Perch, <i>Perca flavescens</i> .	Chub, <i>Scomber corporalis</i> .
Yellow perch, <i>Perca flavescens</i> .	
Striped Bass, <i>Morone saxatilis</i> .	
White Bass, <i>Morone chrysops</i> .	

SALT WATER.

Sea Bass, <i>Centropristis atraricus</i> .	Sea "Trout," <i>Cynoscion carolinensis</i> .
Sheepshead, <i>Acanthopagrus probatocephalus</i> .	Weakfish, <i>Cynoscion regalis</i> .
Porgy, <i>Scorpaenopsis atripinnis</i> .	Shore Willing, <i>Medicaria littoralis</i> .
Striped Bass, <i>Morone saxatilis</i> .	Crab, <i>Decapoda</i> .
White Perch, <i>Morone americana</i> .	Crab, <i>Decapoda</i> .
Spot, or Lafayette, <i>Leiostomus xanthurus</i> .	Spanish Mackerel, <i>Scomber maculatus</i> .
Spot, Redfish, or Channel Bass, <i>Seriola lalandi</i> .	Bluefish, <i>Pomatomus saltatrix</i> .
Tautog, <i>Tautoga onitis</i> .	Britton, <i>Sardinia pilchardus</i> .
Pollock, <i>Pollockius carbonarius</i> .	Kingfish, <i>Menticoccus nebulosus</i> .

FISHING IN TENNESSEE.

WHILE the heat in our city was almost intolerable, it took but little persuasion to induce me to accept an invitation to visit the loveliest stream in middle Tennessee, watering as it does one of the most fertile and beautiful sections of the State. This charming water-course is supposed to have its source in an under-ground lake in Williamson county. This, added to the fact that at every few hundred yards it is fed by cold springs, many of which burst forth from the solid rock under its banks, account for the coolness of the water and the consequent superiority of the fish found in it. The bass and black perch, even the catfish taken here, have a justly merited renown for their guinness and excellence as food. When not troubled by freshets, the waters are as clear as crystal, passing over strata of solid rock and gravel, in places forming beautiful cascades, which in turn run into deep pools and eddies in which the fluky beauties delight to exist. Big Harpeth is the residuary of the South, as well as several other minor streams which have the same source. In following the winding course of the South Harpeth, the roadway is about half in the river and half over gravel beds, the narrow valley being occupied by fields, the rich and luxuriant crops of which made my eyes glad with the prospect of plenty. Where our road lay in the stream, or at places where it crossed, I was struck with the immense quantities of small fish. As Col. Sellers says, "There are millions in it." In the deep holes and under the ledges of rocks and overhanging trees I could see the great fat bass, lolling about as lazily as the hazzard on China at Naples. Oh! how I longed for a rod, line and a few lively minnows to take in a mess for supper. At a crossing where the water was not more than two or three inches deep, but within a hundred yards of what is known as the Flat Rock, I saw, angling away earnestly as possible, my young friend "Tom Allison." I hailed him, but he was too much occupied to answer at the first call. I was just blowing up to make another when I saw him give a jerk, and in the next instant was reeling and unreeing and laboring with something which it seemed might as well be a ton of lead as anything else. In breathless anxiety I stopped and watched. "That's well, old boy! Don't let it go to great a hurry," were the words I found coming involuntarily in whispers from my lips. Just in the midst of my ecstatic reverie "Tom" landed his game. It proved to be a three-pound bass, and a brighter, handsomer one of the species I never saw. "Now, Colander, I am at you. Come and take a hand: or say, wait until morning when they will bite better." "All right," I replied, "and we will be off at once to the house and join the 'Squire.'" This last-named was Tom's father, and a finer specimen of the old Tennessee farmer cannot be found in the country. His home is not a fancy Gothic country seat, but a commodious dwelling, without architectural pretensions, comprising all the comforts the most fastidious could desire. The kind "old lady" and the charming Miss "Mattie" soon came out to join the party and welcome us to their delightful home. What a retreat for sportsmen! was my first thought. Tom had a fine bass, caught but a few minutes before, and the servant to take it away to be cooked for our supper, while his bounds, glad to see him, were giving evidence of their desire to have a run, by giving voice to those delicious notes which are only fitted for the ears of the fox or deer hunter. Guns stood in the hall-way, game-bags and hunting-horns, all showed by the superior cleanliness and good order in which they were arranged, that an adept was their owner.

We ate a most hearty meal: fried chicken, clabber, luscious peaches and cream—the latter so rich and thick that no one questioned the dear little "Jersey" which gave it.

resigned all desire for any other scenes, and dwell there complacently with the charming surroundings, if such had been my luck; but unfortunately the abominable "business" compelled me to turn my back on what would have been my greatest pleasure. I could neither follow the bounds that night, as there was no moon to light our path, nor take a turn at the fine bass in the morning, because 9 A. M. was the hour I was to be at the desk. I was glad to hear from the "Squire" that the forked mouth sucker was really in the South Harpeth, and in great quantities; also all varieties of fish were rapidly increasing since the protective laws had been enforced. The game laws had effected the same results. Pheasants (grouse), which had become almost extinct, are coming back in great numbers. As for quail, the prospects for next winter are most brilliant. Sitting on the porch smoking and talking with my good friends, I was constantly interrupted by the melodious song of "Bob White." The "Squire" has a number of pigeons which prefer roosting in the fine beech trees in his yard to the houses built for them. This I found curious, as I had never seen the like before. In the fall I intend returning to the "Squire's" and have a fair trial at the many kinds of game and fish in the country. A more lively spot for sportsman than near his place I never saw. Trees which keep their foliage all the year to camp under, superb springs of icy cold water at your feet, fire-wood abundant—and all in the hearing of farmers who have plenty, live in style, and would gladly furnish milk, butter, chickens and vegetables for the mere asking. Reluctantly at 4 A. M. I bade farewell to my friends. J. D. H. Nashville, Tenn.

THE DOMINION RIVER FISHERIES.

Concerning the leasing of salmon rivers the *Mirimichi Advertiser* says: "The Riparian Rights Case, has been decided by Justice Gwynne in the Exchequer Court, at Ottawa, against the Government. He affirms that the Department of Marine and Fisheries has not the right to lease the fluvial rivers of this Province to any person to fish exclusively in, although it may regulate fisheries on such rivers. His Lordship decides that the owners of the soil have the right of fishing in inland rivers above the ebb and flow of the tide, but the public have the right of fishing in the sea and on the bays and arms of the sea. The Crown Grants of land adjacent to rivers above the ebb and flow of the tide carry the right of fishing in the river, unless specially excepted and, even then it would not be given to the public. "This decision is in accordance with equity and against the assumptions set up by the first Canadian Minister of Fisheries and persisted in by his successors. An appeal will, it is said, be carried to the Supreme Court of Canada."

AMERICAN SARDINES.—There are several fishes put up as sardines in Maine and New Jersey, but in most cases a foreign label is put on the cans when in fact they are good enough to eat on their merits. The "sprat" *Clupea sprattus* is largely used in Europe as a "sardine," as is also the herring, or rather the latter portion of it cut off at the dorsal fin. In this country the menhaden or moss bunker is the principal fish so put up, and they are excellent if properly prepared, the main thing being to get a fish with moderately soft bones which are further softened by steaming and then putting them up in good oil. In Maine the business is brisk at present; there are at present eight sardine factories in Eastport, running full blast, night and day, turning out weekly about 3,500 cans ready for market, and giving employment to about 600 hands, male and female. The pay-roll of these factories foot up to some \$6,000 per week. During the past two months there has been an abundant supply of fish, and the prospects are excellent for a good fall's work. In a few weeks there will be three more factories added to the number, which will give employment to about 150 more hands.

BIG BASS FROM GREENWOOD LAKE.—*New York, Oct. 11.*—At Greenwood lake, N. J., Friday morning, under pilotage of Sam Harrison, Chas. Myers and Chas. Dennis, Jr., took nine Oswego or big mouth bass weighing twenty-seven and a half (27½) pounds; weights of the three largest 6½, 6 and 3½; measurement of first, length 21 in., girth 10 in., mouth open lip to lip 4½ in. On Saturday morning same party caught 11 bass weighing 25 pounds; weights of three largest, 4½, 4, 3½, the second fish having though his lip a hook lost the previous day by Garrison. Yours, Old Subscriber.

BASS FISHING ON ST. CLAIR FLATS.—*Detroit, Oct. 11.*—I had the pleasure last week of a trip to St. Clair Flats with Mr. E. J. Fairfield, of Ohio, and Mr. C. C. Pickering, of the same State, both of whom are enthusiastic fishermen. We had time for only two days' sport, and had the luck to have even that short time "bit-off" at 10 o'clock A. M. of the second day by the loss of our minnow bucket, by the breakage of its fastening to the boat. We, however, got some 24 or 25 bass, such as does one good to look at, not to speak of the delight of catching. Our string must have weighed 90 pounds. Some splendid strings of bass are now being taken there. The water is cold and clear, and every bass caught gives sufficient to satisfy the fellow at the other end of the line.

Host Slocum tells us the Star Island Hotel will be enlarged for next season by the addition of some forty or fifty rooms, and in many ways improved so as to add to the comfort and pleasure of his guests. In fact they are even now at work with a large dredging machine on one side of the hotel. With these additional hotel facilities and the marked improvement in the fishing at the flats another season must make those waters still more famous. Uno.

FISHING IN THE GENPOWDER.—We were on our way to what is called the "stone pile" to fish for white perch, and were under the guidance of Mr. Wm. Eccleston (familiarily called "Old Joe Eccleston"), a veteran ducker, fisherman and decoy maker of the Gunpowder and Carr's Island region. He soon put us on the stone pile, and as soon as we got our rods together and our lines rigged, our sport commenced. It was half-past ten when we began fishing, and stopped at four. During that time we caught fish constantly. Large white perch, rock taylor and spots. The writer was unfortunate enough to loose the screw that held the handle of his reel on, and just after doing so struck a large rock fish. Of course he could do nothing but hold on to him, and the strain was so great that the hook tore out of his mouth; the spring of the pole was so strong that the line flew up into the air, and on the upper hook there was a small taylor. The jerk was so violent that it tore the hook out of his mouth also. We were becalmed going home and had to row six

miles, which made us so late that we had not time to count or weigh our fish, which would have more than filled a bushel basket. E. A. R.

October 4, 1880.

BLADDERS OF FISHES.—In a recent note to the Paris Academy, Prof. Marangoni gives the results he has arrived at in a study of the swimming bladder. He states first, that it is the organ which regulates the migration of fishes, those fishes that are without it not migrating from bottoms of little depth, where they find tepid water; while fishes which have a bladder are such as live in deep, cold water, and migrate to deposit their ova in warmer water near the surface. Next, fishes do not rise like the Cartesian diver (in the well-known experiment), and they have to counteract the influence of their swimming bladder with their fins. If some small dead and living fishes be put in a vessel three-quarters full of water and the air be compressed or rarefied, one finds in the former case the dead fish descend, while the living ones rise, head in advance, to the surface. Rarefying has the opposite effect. Fishes have reason to fear the passive influences due to hydrostatic pressure when fished from a great depth their bladder is often found to be ruptured. Thirdly, the swimming bladder produces in fishes a two-fold instability—one of level, the other of position. A fish, having once adapted its bladder to live at a certain depth, may, through the slightest variation of pressure, be either forced downward or upward, and thus they are in unstable equilibrium as to level. As to position, the bladder being in the ventral region, the centre of gravity is above the centre of pressure, so that fishes are always threatened with inversion; and, indeed, they take the inverted position when dead or dying. This double instability forces fishes to a continual gymnastic movement, and doubtless helps to render them strong and agile. The most agile of terrestrial animals are also those which have least stability.

FISH CULTURE IN TENNESSEE.—A correspondent writes us that the protective laws of this State are working well wherever they have been enforced, and the fish have increased. Fish Commissioner George F. Akers has planted 500 German carp, received from Prof. Baird, U. S. Fish Commissioner, in ponds near Nashville, and they are now of 2½ lbs. weight. The State has no appropriation for this purpose, and therefore but little can be done in the way of replenishing depleted waters. It is much to be hoped that the next Legislature will have wisdom enough to remedy this, and not by a spirit of false economy allow the people to be deprived of this great food resource. Rivers, streams and ponds should no more be allowed to lie unproductive than the land, and Tennessee should not allow this source of wealth—for certainly it is wealth—to remain in a state of neglect.

BLACK BASS IN NEW JERSEY.—A good chance to get small black bass for stocking waters in New Jersey is thus shown by the *Newark Sunday Call*: Small black bass are now being caught in large numbers in the seventeen-mile level of the canal, and it is evident that the water has in some manner become plentifully stocked with them since spring. It is a pity that this is the case, for the annual drawing off of the level will result in their destruction before they have attained respectable size. By watching for the time when the canal is emptied a fine supply can be obtained for stocking private ponds.

Fish Culture.

LIST OF FISH COMMISSIONERS.

THE following is a list of the Commissioners of Fish and Fisheries of the United States and Canada, as far as it has been possible to obtain them. It has been corrected to October 1 by correspondence, and there are some changes from that of last year. Arkansas has a commission of three a few years ago, but never had an appropriation and did no work. One member died, one resigned, and last year, after the list was made up, a letter came from Mr. N. B. Pearce, of Osage Mills, saying that he supposed that he was still a Commissioner although there was nothing to do, or if there was anything to be done a lack of the needful prevented it. This year he has failed to respond, but Texas comes into line instead. The corrected list now stands:

CANADA.	Ottawa, Ontario.
W. F. Whitaker,	Newcastle, "
S. Wilmut, Supt. of Fisheries,	
NEW BRUNSWICK.	
W. H. Venning, Inspector of Fisheries,	St. John.
NOVA SCOTIA.	
W. H. Rogers, Inspector of Fisheries,	Amherst.
PRINCE EDWARD ISLAND.	
J. H. Duvar, Inspector of Fisheries,	Alberton.
BRITISH COLUMBIA.	
Alex. C. Anderson, Inspector of Fisheries,	Victoria.
UNITED STATES.	
Prof. Spencer F. Baird,	Washington, D. C.
This State had a Commission last year, but we have been unable to get a reply to letters addressed to them.	
CALIFORNIA.	San Francisco.
S. R. Throckmorton,	
B. B. Redding,	Niles, Alameda Co.
J. D. Farwell,	
COLORADO.	Brookvale.
W. E. Sisly,	
CONNECTICUT.	Hartford.
W. M. Hudson,	
Robert G. Pike,	Middletown.
G. N. Woodruff,	Sherman.
GEORGIA.	Atlanta.
Thomas P. James,	
(Com. of Agriculture and ex-officio of Fisheries.)	
ILLINOIS.	Chicago.
N. E. Fairbank,	Quincy.
S. P. Bartlett,	
(Mr. J. Smith Briggs, of Kankakee, was on the board, but his term has expired and no appointment has been made to date.)	

B. F. Shaver,	IOWA.	Anamosa.
D. B. Long,	KANSAS.	Ellsworth.
	KENTUCKY.	
Hon. John A. Steele,		Midway.
Dr. Wm. Van Antwerp,		Mt. Sterling.
A. H. Goble,		Cadottelburg.
Hon. C. J. Walton,		Munfordsville.
Dr. S. W. Coombs,		Bowling Green.
John B. Walker,		Madisonville.
Wm. Griffith, President,		Louisville.
W. C. Price,		Danville.
P. H. Darby,		Princeton.
Hon. J. M. Chambers,		Independence, Kenton Co.
E. M. Stilwell,	MAINE.	Bangor.
Everett Smith,		Portland.
(Commissioners of Fisheries and Game.)		
	MARYLAND.	Baltimore.
T. B. Ferguson,	(Address 1,327 M. St. Washington, D. C.)	Easton.
Thomas Hughtlett,	MASSACHUSETTS.	Brookline.
Theodore Lyman,		Winchester.
E. A. Brackett,		Boston.
Asa French,		
Eli R. Miller,	MICHIGAN.	Richland.
A. J. Kellogg,		Detroit.
Dr. J. C. Parker,		Grand Rapids.
	MINNESOTA.	
Daniel Cameron,		La Crescent.
Wm. W. Sweeney, M. D.,		Red Wing.
R. Ormsby Sweeney, Chm.,		St. Paul.
	MISSOURI.	
Hon. Silas Woodson, Chm.,		St. Joseph.
Hon. H. Clay Ewing,		Jefferson City.
John Reid,		Lexington.
	NEBRASKA.	
R. R. Livingston,		Plattsmouth.
H. S. Kaley,		Red Cloud.
W. L. May,		Freemont.
	NEVADA.	
H. G. Parker,		Carson City.
	NEW HAMPSHIRE.	
Sam'l Welber,		Manchester.
Luther Hayes,		South Milton.
Albina H. Powers,		Plymouth.
	NEW JERSEY.	
Dr. B. P. Howell,		Woodlary.
E. J. Anderson,		Trenton.
Theo. Morford,		Newton.
	NEW YORK.	
Hon. R. B. Roosevelt, 76 Chambers st.,		New York.
Edward M. Smith,		Rochester.
Richard U. Sherman,		New Hartford.
Eugene G. Blackford, 809 Bedford ave.,		Brooklyn.
	NORTH CAROLINA.	
P. M. Wilson (acting Com.),		Raleigh.
	OHIO.	
J. C. Fisher, President,		Coshocton.
R. Cummings, Treasurer,		Toledo.
L. A. Harris, Secretary,		Cincinnati.
	PENNSYLVANIA.	
H. J. Reeder,		Easton.
B. L. Hewit,		Hollidaysburg.
James Duffy,		Marietta.
John Hummel,		Sellinggrove.
Robert Dalzell,		Pittsburg.
G. M. Miller,		Wilkes-Barre.
	RHODE ISLAND.	
Newton Dexter,		Providence.
John H. Barden,		Rockland.
Alfred A. Reed,		Providence.
	SOUTH CAROLINA.	
A. P. Butler,		Columbia.
(Com. of Agriculture and ex-officio Com. of Fisheries.)		
	TENNESSEE.	
W. W. McDowell,		Memphis.
Geo. F. Akers,		Nashville.
Hon. W. T. Turley,		Knoxville.
	TEXAS.	Austin.
J. H. Dinkins,		
Prof. J. L. Barfoot (Curator Desert Museum),	UTAH.	Salt Lake City.
	VERMONT.	
Dr. M. Goldsmith,		Rutland.
Charles Barrett,		Grafton.
	VIRGINIA.	
M. McDonald,		Lexington.
	WEST VIRGINIA.	
Henry B. Miller,		Wheeling.
O. S. White,		Romey.
N. M. Lowry,		Hinton.
	WISCONSIN.	
Gov. Wm. E. Smith (ex-officio),		Madison.
Philo Dunning (President),		Madison.
J. V. Jones,		Oshkosh.
C. L. Valentine (Secretary and Treasurer),		Janeville.
Mark Douglas,		Melrose, Jackson Co.
John F. Antidel,		Milwaukee.
Christopher Hutchinson,		Deetown, Grant Co.

THE ANISE-BAG HUNT.

All glory to man and all glory to woman,
Who rode in this hunt; they have cause to be vain;
They've shown quite enough of the nature called human,
But little enough of the nature humane.
Most glory to him, may his memory be scented—
Perchance 'twas a dork clerk, some pestle-pot run,—
Who undug his brain till at last he invented
This glorious sport of the anise-bag hunt.

Expenses in such actions to be advanced by County Treasurer on requisition of District Attorney. On recovery, ex-

costs to go to District Attorney. County Treasurer to pay surplus over expenses into State Treasury by Sept. 30, to be part of the general fund.

Judgments Enforced.—By execution against the person. Imprisonment to be not less than five days, or if the judgment and interest be more than \$5, then at the rate of one day for \$1. Several penalties may be in one suit, but only one imprisonment on the judgment. Imprisonment does not satisfy judgment.

CRIMINAL PROCEEDINGS.

Convicted Persons.—Punished by fine not less than \$5 nor more than at the rate of \$1 for every dollar of penalty, when same exceeds \$5.

Or by imprisonment in county jail or penitentiary for not less than five days nor more than one day for every dollar. Or by both fine and imprisonment.

Courts having Jurisdiction.—In towns and villages.—Courts of Special Sessions. In cities.—the courts having jurisdiction to try misdemeanors.

Fines to be paid within ten days by Court receiving them to the Treasurer of the county where offense committed; except in New York city, to the chamberlain, to be kept as a fund to enforce the game laws as the County Supervisors or the New York City Aldermen may direct, for special detectives or rewards for detection and arrests.

Arrests without warrant required of sheriff, under sheriff, deputy sheriff, police officer, constable, game constable and by constable when finding person violating game law, and to bring him before the nearest magistrate having jurisdiction.

Neglect to enforce law by officer or magistrate made a misdemeanor when proper information or complaint is furnished to him.

Warrant of arrest to be issued by Justice of Marine or District Court in New York city, or by Justice of the Peace, Police or other magistrate on receiving security for costs and affidavit of violation against non resident temporarily within jurisdiction, or person whose name and residence are unknown, to be committed or held to bail to answer charge.

Search warrant to be issued by same magistrate, authorizing search of house, market, boat, crate, car or other building, and to break open any apartment, chest, box, locker, crate or basket and to examine contents, provided proof or probable cause to believe in concealment of game or fish, taken during close season, be furnished, and also security approved by magistrate for damages sustained by defendant, if he be found not to have violated the law.

SPECIAL GAME OFFICERS.

Game Constables.—Board of Supervisors at a regular meeting, by majority vote of members, may authorize election by each town or city of one or more game constables, they to be chosen at town meeting for term of one year, to take oath of office and have power to serve process under game laws, like town constables in civil cases.

In Kings County.—To be appointed by Board of Supervisors at a regular meeting. Term to expire December 31 after appointment, upon successor qualifying.

Warrants of arrest in actions by Kings County game constables, as in cases provided by Section 19 Code of Procedure (old code), except no undertaking is required from plaintiff. Sheriff of Kings not to exact deposit or pay from plaintiff on such arrest.

Compensation of Game Constable to be same as for services by town constables, and also one-half the penalties recovered by him.

Neglect to prosecute by him, on proper information, punished by forfeiting \$25.

Failure to Reconvict by Him.—The costs to be paid to defendant by the county.

Game and Fish Protectors.—The Governor authorized to appoint eight to enforce the game laws. Actions by them to be in the name of the people. Terms of office to be three years from date of appointment. Vacancies filled by Governor. May arrest without warrant any person violating the game laws. Person to be taken before any magistrate having jurisdiction, who shall proceed without delay to try, determine and enforce sentence. Traveling expenses not exceed \$250 in any year for each, allowed, besides salary of \$500, payable by State Treasurer.

The protectors not holding the office are (see FOREST AND STREAM, Sept. 30, 1880): S. V. R. Bratton, 59 Division street, Albany, N. Y.; John Jessup, Hudson, Columbia County, N. Y.; Sylvester J. Palmer, Indian Lake, Hamilton County, N. Y.; John Liberty, Elizabethtown, Essex County; Daniel B. Horton, Ithaca, Tompkins County; G. M. Schwartz, Rochester, Monroe County; William P. Dodge, Prospect, Oneida County; John J. Collett, Cobleskill, Schoharie County.

LOCAL LEGISLATORS.

Boards of Supervisors at annual meeting may make any regulations or ordinances protecting other birds, fish or game.

Also for further protection of those above named, except wild deer, and may prohibit hunting or fishing in particular localities, or waters within their counties for limited periods and during certain months. They may prescribe punishments and penalties and adopt measures to enforce and collect same. Such regulations and ordinances to be published in the county papers in which session laws are published. Certified copy to be filed with County Clerk.

Note.—The annual meeting is in November in each year.

They may raise by tax, same as other county taxes, an amount not exceeding \$1,000, in any year, to aid the enforcement of the game laws.

Respectfully submitted,

ABEL CROOK.

PHILADELPHIA LETTER.

WE are having an unusual quantity of running quail in the suburbs of Philadelphia. At Germantown, Frankford and West Philadelphia, numerous coveys have been seen in the yards of the wealthy residents. These birds were not bred here but have migrated from sections where more broods have been reared than can be supported through the winter. It is always the case when the quail has enjoyed a favorable breeding season, as the past spring and summer have proven; instinct prompts them to distribute themselves, and search a country where fewer birds have been bred. The average number of berries to an ordinary farm of seventy-five or one hundred acres is seldom more than three or four, unless a great quantity of grain has been planted, which would then furnish the necessary stubble requisite for feeding grounds and prevent too great a migration.

Our season for quail shooting opens next week, and still the foliage remains green. Poor prospect for successful cover work, is it not? November 1 should be the commencement of the open season; by that time the trees would be devoid of a part of their leaves and the growth of the birds as-

sured. A few woodcock are coming in; these from the northern and more elevated sections whither they have winged their flight to pass their moult, and to remain until driven back again by the early cold snaps of the mountain regions. Here, while on the subject of the migration of birds, let me mention a discovery your correspondent made regarding the flight of the sora rail to our river flats this season. Shooting for rail began Sept. 1. Few birds were at first found, and only those that had been hatched on our marshes; the flocks during the beginning of the month furnishing enough water to afford fine sport had a great quantity of rail been present. The cause for this scarcity was evident—the flight had not come on.

It was about the 8th to the 10th of the month, I think, as your correspondent was making every effort to go to sleep, having retired about eleven o'clock, innumerable rails were heard passing overhead, and continued so for over an hour. The "creek creek, keet keet" of the sora was plainly distinguishable. Myriads must have arrived on our shores that night. Curious to know the result of this flight I made inquiry the following evening and learned that every boat that had gone on the river reported from fifty to seventy-five rail, each "poor little birds in poor condition," evidently owing to their late migration.

About the latter part of August, a similar flight of grass player was noted by the writer as he sat in his flight late one evening, but inquiry was not made as to the shooting which followed. On both occasions the night was a drizzly or hazy one, and I have always noticed birds of all kind, choose such seasons for their migrations, whether it be by day or night.

It may be of interest to your readers to know that Mr. J. Warner Kinsey, of Barnegat, has associated himself with a number of prominent Philadelphia and Camden gentlemen, and the company are about erecting a commodious hotel on the two-mile beach property near the inlet. The building will be large enough to accommodate three or four hundred guests, and the names of such liberal gentlemen as Gen. Grubb, Allen Middleton, B. F. Archer, W. F. Baily, F. Fenimore and a host of others guarantee the success of the enterprise. Barnegat Inlet, you know, has long been famous for its fishing, and its waters teem in proper season with the blue fish, barl, black fish, bass and weak fish. A proper legislation will be made for a continued protection of both fish and fowl at this point, the good effects of which have already been noticed in the past year.

One damaging kind of shooting followed by the baymen of the Jersey Coast should be stopped—that of night shooting for black duck as they come into the ponds to feed; watching it is called. It has the effect of making the fowl extremely wild, and many appear to look with suspicion on any great number of their own kind collected together, evidently suspecting their deceits.

The damaging results of the continued harassing of the canvas back and red head on their feeding grounds in the past is being felt by the sportsmen who visit Havre de Grace for the purpose of enjoying sink box, or battery shooting (murder it should be called). At one time these batteries were allowed to be moored on the flats every day. Latterly it is permitted only every other day. When it is known that the batteries will be in place, from November first until freezing weather, is taken up with one of these machines, surrounded by from two to three hundred decoys, is it a wonder that the canvas back is deserting his once favorite resort and gradually appearing in greater numbers on the lakes of our Western States? The use of batteries has long since been abolished by law in the Long Island and New Jersey waters, and it will not be long before such shooting will be given up in the sections first mentioned. We notice likewise that the general migration of all birds of the north is made from the south to north, westward of the Allegheny Mountains. It is so with the snipe, for instance. Who nowadays finds them east of the range in the great numbers we once did? Yet they appear in increased quantities where they are comparatively less persecuted. Do away with all spring shooting and a remedy will be found. HOME.

THE MINNESOTA DOG POISONING AGAIN.

GLENN ALLEN, Va., Oct. 14, 1880.

I reached southwest Minnesota on or about the 25th of August last, going direct to Fairmont, where I remained until I left the State six weeks ago, having no personal knowledge of the Windom people or their dog-poisoning performances. What I learned in regard to that matter was derived partly from members of the St. Louis Kennel Club and partly from editorial articles in the Windom Reporter. The facts then alleged were substantially the same as those detailed in your columns by "Windom Pot Hunter"—that a number of bird dogs had been poisoned; that the poisoned dogs were owned by both resident and visiting sportsmen, but that the residents were the principal sufferers, and I learned the presumption arose that the visitors were the poisoners. This was the theory advanced at the time by the Windom Reporter, and I see it is now indorsed and re-affirmed by the "Windom Pot Hunter." To avoid the possibility of doing "Pot Hunter" an injustice in this matter, I will quote his own words: "Hence it will be seen that the Windom sportsmen are the principal losers of dogs, poisoned, as many believe, in the interest of non-residents. And again, 'I have no doubt the Memphis dog ate the meat that was laid for the Windom dog.'"

Now, we had a different theory on the subject. We were certain the villany was not committed by Windom sportsmen, for sportsmen do not poison dogs. And the same reasoning applies to the visiting sportsmen, now supplemented, if such a theory were necessary, by the additional fact that the visitors did not arrive, according to "Pot Hunter's" own data, until three days after the work of death had been inaugurated. We believed then, as I believe now, that the deed was done by the pot hunters of Windom, and we deemed it our duty to throw out a word of warning until such time as the resident sportsmen and better class of citizens should be able to manage the vicious element which was then in manifest ascendancy. How near we were right in our conjecture is sufficiently attested by the limping logic and foolish innuendoes which glister through the bewildered sentences of their chosen champion and spokesman.

Windom is not the first Minnesota village that has been injured and dishonored by men of this stripe. Four years ago Winnebago was the seat of a nest of dog stealers, but the citizens and press of that town, instead of flippantly surmising that foreign sportsmen were the thieves, promptly took the matter in hand, ferreted the rascals out, and Winnebago speedily became one of the most popular hunting centres in the State.

Windom takes the other plan. The tone of a "Pot Hunter's"

communication is in the very spirit of the Reporter's editorials. Its animus cannot be mistaken. It extends a specious welcome while it breathes a latent menace. There are powder and shot for sale, and the wandering sportsman must be cajoled, but the birds, the birds of Windom, are a perquisite sacred to the elect.

What are "Pot Hunter's" grievances? He has two; and he dwells on them in pasted evidence and with "damnable iteration." Twice he tells us that some visiting hunters add or tried to sell their birds; and three (times, and with three separate and distinct groans, he informs us that "they brought their ammunition with them!"

With the former of these charges this controversy has nothing to do. Men who make commodity of their game are not sportsmen but pot-hunters, and they and "Windom Pot Hunter" had better settle the matter among themselves in family way. I will here state, as a matter of fact, that the Eastern and Southern men who take hunting trips to the West rarely, if ever, sell their game. During the past few years I have hunted with some scores of them, and not a single instance of the kind has fallen within my observation. They are guilty, however, of a much graver offense, viewed from the pot-hunter's standpoint. They give away their birds, and thus utterly ruin a trade which they would otherwise have profitably injured.

The other charge carries its own answer. People buy ammunition as they buy everything else—where they can get it most conveniently. Let Western towns keep a reasonable stock of a fair quality, and visiting sportsmen will soon find it out. No man on a second visit carries ammunition to Albert Lea or Fairmont.

Throwing this question into its briefest form, we find that a sportsman may get quarters at Windom by complying with certain demands, either expressed or implied, as follows:

1. He must use such ammunition as "Pot Hunter" chooses to furnish.
2. If he can kill birds with it he must not sell them. To do so would be an infringement on the pot-hunting monopoly.
3. For the same, or a yet deeper reason, he must not give his birds away.

He must also endure the wrath of vengeful farmers, whose hemp has been trampled down by the privileged order of pot-hunters.

5. Failing in any of these requirements, his dogs shall be poisoned and himself vilified.

I respectfully submit that the demands of "Windom Pot Hunter" are unreasonable. WANSSE.

MISSISSIPPI TURKEY HUNTING.

ALREADY many of our sportsmen may be seen looking after the condition of their trusty breech-loaders, putting them in order for the grand gala day; for all will go on the 15th—some to enjoy the chase of the fleet-footed decoy as he glides gracefully from his long and uninterrupted summer retreat with the huzle notes of the eager peck in full cry at his heels. How refreshing now grow the murmurs from the thicket, the full quartet in advance of the bounds. He stops and listens. It is the old familiar sound that he once disturbed him the winter before. He does not tarry long, for the restless peck is soon at his heels. He bounds away and is soon far in advance of his eager pursuers and is brought down by the steady aim of some hunter who has taken a stand for him; or, perhaps, he eludes both hunter and hounds to run the gauntlet at another time.

Our sportsmen care very little for deer hunting and prefer to take their setters and pointers and hunt the quail, of which we have an abundance. There are others who go forth in search of that most beautiful of all game birds in America—the wild turkey. The sportsman who has not hunted this bird has missed the most pleasure-giving excitement of all sport connected with dog and gun. I guarantee that it will cure any man in the world of the most obstinate case of blues. At this season of the year they go in flocks, one or more broods together, with one or two old hens, who keep a sharp look-out for hunters, hawks and other varmints that are likely to disturb the young ones. Upon the approach of danger they give the alarm and away goes the brood to the brush. They are about grown at this season of the year, and the young gobblers are in what we call the "Shanghai" state—rather gawky and awkward. The young hens are better developed and are more beautiful.

The first thing we do preparatory to a turkey hunt is to hunt up our turkey caller, clean the dirt-drawer's supply of dirt and spiders off it, give a yelp or two to see that we have not forgotten how, get our horn, dog and gun, and then we are off for the woods.

After getting to the woods, we drive every part of the country in which we expect to find them, particularly around small fields that have been planted in corn and peas and surrounded by woods. The dogs—usually hounds or setters—being good reliable ones, know what we are hunting, and never a whimper do you hear from them unless they scent a turkey. When they "strike," if cold, they circle until they strike it fresh and warm, where the turkeys have only a short time before scratched up the leaves. Then away they go, the hunters after them on horseback—if hounds, in full cry; if setter, never a word until he sees the game, when he rushes among them, barks and flushes the flock, the same as he does in every other kind of hunting. The turkey hunter comes up in the meantime and calls off his dog, which is running and ripping in every direction, endeavoring to find out what has become of the game. (A real fine setter, well trained for turkeys, has the most intelligent looking countenance after he has flushed a flock of turkeys that I ever saw on a dumb brute.) Having called off his dog, the hunter circles around to see if he has them all up; if so, he then rides away in an opposite direction, taking his dog or dogs with him, at least a quarter of a mile or more, bitches his horse and waits—if in the early part of the season, only a short time. When everything becomes quiet, he leaves his dog with his horse and quietly goes back on foot to where the turkeys were flushed. Having selected a place by the side of the log, or in front of a large tree, where he can see all around him and not be easily seen, he draws his yelp and gives a careless chuck, and a yelp or two in imitation of the wild turkey, and a short while after he hears the low and lonesome sounding "peep-peep" note of the young one in answer. It will not be long before he sees his game coming, anxiously looking in every direction for the old hen. The hunter gives another low yelp, and the turkey confidently walks up and is brought to bag. The report of his gun frightens away the old hens, and he then selects a new place and goes through the same maneuvers, until he kills several. The others hang pretty close by, and if he makes a mistake, get very wild and endeavor to use his best tactics to fool them. As the season advances

they become thoroughly educated, and when flushed the hunter sometimes has to wait till near sundown or roosting-time before he can get them to answer; and when they have concluded to come they will slip on you without saying a word. When the hunter finds them so wild as this he has to be very particular when the game comes in sight, not to move any portion of his body, or the wary bird gives his note of alarm (cut?) and is off like a bullet. If a muskrat gets on the hunter's nose he must let him remain and bite, or lose his turkey. I have sometimes found them so wild in the latter part of the winter, just before "gobbling time," that when I would flush them in the early part of the day they would pay no attention to a yelp any time during that day. I might catch one slipping on me and kill it, but when I find them so wild as this I quietly leave them and get among them early the next morning, and find no difficulty in killing one or two at that time; but after I have fired my gun once or twice, the others become very shy and are hard to kill.

"Keno" has promised us an article on Mississippi bass fishing.

A MUD DUCK HUNT.

YEARS ago a half dozen of us college chums used to spend our spring vacation in a crusade against the water-fowl which were so abundant in the marshes along the east bank of the Father of Waters, below Burlington, Iowa. Greck roots and snipe sections were banished from our minds, and we at least had a free and easy time, with no learned professor or conceited tutor to spend several hours a day in finding out how little we knew, although there were numerous attendant hardships. We usually camped on an island several miles below the town, to avoid the labor of rowing back every night, and the fickle-minded weather-clerk who was on duty during March or April frequently made it decidedly uncomfortable for us. Yet when nature refused to snipe we tried the harder to be merry, and with the assistance of the wit of the college, who was always one of the party, generally succeeded fairly well.

We picked our company, and were disposed to be amused when "The Duke" proposed to go along. But when he insisted on going, in spite of numerous broad hints that his absence would be painful to us, it became positively annoying. Jones, our humorist, came to the rescue, and with a sly twinkle that promised fun, said the Duke must go. It was accordingly arranged that he should be one of the party.

The Duke was one of the characters that help make up a variety in the world, though just what his was created for was never clear to me. He was a born and bred dandy, a masculine Flora McFlimsey, and only just a trifle less feminine than his fairer sisters. The chief objects of his life were to wear fine clothes, take care of his magnificent whiskers and sip from fine French to girls who were shallow-pated enough to listen. It would be impossible to conceive of any human being farther removed from the typical sportsman, and what he wanted to go duck duck shooting for we could not guess. Yet when it was arranged that he was to go he zealously began his preparations, and when we called for him on our way to the depot he had enough baggage to fill a Saratoga trunk. He had never owned nor handled a gun, but had purchased the best in the market for the occasion. His supply of ammunition was more than the whole party could use, and he had several changes of linen laid out. But the Duke's costume was immense. The day was warm, and he had on a new light suit, flaming necktie, long-legged patent-leather boots, silk hat and lavender kids. We remonstrated in vain, and the Duke started off the best dressed man that ever left home for a week in a swamp.

When we were fairly off Jones unfolded his plan, which was simply to give the Duke a mud bath. The swamp is full of channels, in which the water is two or three feet deep, and all the soil is soft mud, washed in by the freshets, so that the boats were in constant use. There were eight in the party, and the plan was to take three boats, in one of which should be only the Duke and one other man, and at the first good chance to dump him. It was agreed to, the well-worn cards brought forth, and while the Duke innocently looked on Jones was condemned to put his own plan in execution.

Early next morning we pulled out of East Burlington, and two or three miles below began to reach the feeding-grounds, where the ducks were busy with their morning meal. The boys couldn't resist the temptation for an occasional good shot. The Duke caught the fever, and leaving Jones to manage the boat was soon banging away as fast as he could load and in such a reckless style that he was in more danger of shooting himself or some of the other boys than a duck. Jones watched his chance, and it soon came. The boat was close up to a particularly soft mud bank, and when the excited Duke was standing up in the stern and ready to fire, a quick jerk did the business. The gun went in first, and he followed it as far as his shoulders. He managed to get out alone, and half-strangled, made a dash for the bank to get out of the water. This fairly buried his lower extremities, and he had to be helped out.

What a spectacle he was! His glory had departed in an instant, and his love for duck hunting had gone with it. All he wanted then was to go home, and we fished out his gun, put him in the small boat, and started him for Burlington, sadder, wiser and not half so handsome as when he started. In spite of his injunction to secrecy the story leaked out, and in his mortification the Duke went off on a European trip, and failed to return. He has probably been in places since where he had more sport than duck hunting on the Mississippi marshes, but he don't know to this day that his misfortune was not solely the result of an accident. CORK.

ECHOES OF THE "DITTMAR SPORTING POWDER."

HANCOCK ON DITTMAR POWDER.—FOREST AND STREAM, the leading American sporting paper, is making war on the Dittmar powder and says it is not fit for use.—*The Hancock (N. Y.) Herald*.

MARION, Ga., Oct. 12.

Editor Forest and Stream:

Allow me, as one of your subscribers, to thank you for the entirely convincing articles concerning Dittmar powder. I have frequently used this powder, but you have so clearly demonstrated its danger that henceforth I discard it. J. S. B.

Editor Forest and Stream:

Your writing up the true character of the Dittmar powder was appreciated by many Western readers of the FOREST AND STREAM.

FULTON, Ill., Oct. 16.

Duck shooting has been better here this fall than for many years, but the mallard are not in as good condition as autumn ducks generally are. N. Z.

CHICAGO, Ill., Oct. 15.

Editor Forest and Stream:

A paper that can give us such clear, intelligent and decisive articles, as was your late treatment of the "Dittmar Sporting Powder," is just the kind of a journal the American sportsman wants. Allow me, and numerous others in this city with me, to thank you for having set at rest, once and forever, the question of the safety of Mr. Dittmar's powder. The average gunner has no time to study these things. You have shown us that hereafter we may rely on the FOREST AND STREAM for just such information and advice. N. N. J.

NASHVILLE, Tenn., Oct. 12, 1880.

Editor Forest and Stream:

I have been using the Dittmar powder for the last year and just ordered a box from Mr. D., who failed to send it, his charge d'affaires writing: "Mr. D. has been sick for some time and we are out of powder." But a friend of mine loaned me one of your papers (Sept. 23, 1880) and called my attention to your lengthy article on Dittmar powder, and I must say I am greatly surprised at what I learn. Under the circumstances I of course will discard the use of this powder; and am now amazed that all these things should have remained hooded until lately. A party lost an arm here some time ago by his gun exploding; it was said the powder was made in St. Louis and was the "noisless." I suppose it was closely allied to the Dittmar. I have often wondered why some loads were so much more effective than others. I really like to shoot it, as it is clean and free from that "blasted" emanation that we have in the black. V.

A DITTMAR POWDER TRAGEDY.

In Two Acts.

Act I.

Boy,

Girl,

Man,

Woman,

Girl,

Man,

Boy,

Dust.

Unknown Part.

INFORMATION WANTED.

1. F. W. D. wants good quail and woodcock shooting within 100 miles of New York.

2. S. L. T. wants to find a place where he can hunt and fish for a living.

3. W. K. writes: "I am a consumptive, and am desirous of passing the coming winter in some location where game is abundant and it is also healthy."

4. Mr. R. M. L. wishes "advice as to best place I could go, about 350 or 550 miles either north or south of New York city, where I can find good duck shooting and a comfortable boarding-house."

5. Will some reader of the FOREST AND STREAM inform "Lower Bunk" through its columns where the best place to camp out is, in the piney woods of Maine. A place where there can be found trout, deer and moose, or feathered game. Also what would be the expense (estimated) of each one of a party of six starting from Hartford, Conn. In camping the party to be independent of hotels or log cabins, preferring to rough it in tents.

6. Will gun or some of the readers of your valuable paper please inform me whether wild rice will grow where the white pond lily has got so that it almost covers the surface of the water? Will it kill the lilies out? KETCHUMBY.

7. "C. S. K." Lakesville, Ct., wants a Florida companion.

CHICK-VENTING OLD BROWN.—How often do I turn your pages over, and how I long for Saturday to come. I often wish you came twice a week. But sometimes you make me sick and discontented. I know you mean no harm, dear FOREST, but when I read of the game and fish that others are taking, and selfish I can only steal off a few hours at a time. Once, before my wings were clipped, I too enjoyed my gun and dogs.

Two years ago I knew a swamp of about a mile in length where the woodcock just laughed because no one was allowed to shoot in that swamp. It was owned by an old farmer by the name of Brown, a veritable old-in-the-swing man, who would not shoot himself nor allow visitors to shoot. His hired man told me, one time when I ventured on the ground, not in a very mild manner, that Mr. B. did not allow any shooting there, and that I had better leave, and forthwith I left. Years before men had bagged fifty and sixty birds per day in that swamp, and a desire possessed me that I must hunt that swamp.

I heard of the Dittmar powder, no smoke and very little noise. I went up to the city, saw the gun dealer; he showed me a sample of the powder, and I ordered a can, thinking all the time of my pet swamp of woodcocks. In due time I received the powder, and how well I remember my imaginations as I rode home, thinking of the following day's sport. Already I could see my two setters, Dash on a point, and Dandy backing him up. Then I was looking through the alders to find an opening where I would be the most likely to get a shot. Then I would speak very low to my dogs, "Go on," and Dandy would creep up. "Weeter, weeter," would go the bird. Then I would throw up my gun; a puff, a little noise, and yes, I could see the fine feathers through the top of the alders. Old Brown couldn't hear that—no. "Dead bird!" In would come Dash with a fine longbill. But where is Dandy? Stooping down I would see him just a little further on stiff as a poker—and so did my thoughts run.

I was home about two o'clock. I loaded up six shells with Dittmar according to the "directions." I knew of a small flock of quail near home, and in less than two hours Dandy and Dash brought up hard on. I always let my dogs stand one or two minutes. While I was waiting I thought it was such a good place to shoot I must have two birds, and so I took the Dittmar cartridges from my gun and put in two of Hazard's. I could rely on those. I got one bird with each barrel when they first got up. That's pretty good, I thought. Now for Dittmar. The next was a cross shot. I looked across my old Parker expecting to start the feathers. Well, the gun went off, but not until after the bird had gone before

it. And with the language of one of old I cried, "Great Pompy, ye are too slow!" I tried another Dittmar cartridge with the same result, and that was enough. I shot two more birds with black powder, and I came home. I fired the four remaining cartridges at bar posts with very poor results. They all went off, but some of them hated to, awfully.

But I did not give up about that swamp. You see, dear FOREST, old man Brown had a daughter, and she was pretty, too. Well, to make a long story short, I made Miss Mary's acquaintance, and through her good graces I received an invitation to come up and put my horse in her father's barn. She told me that some of the neighbors did not allow hunting on their farms, but that I was welcome to hunt anywhere on their farm. I thought to myself, "Bless your heart, I only want to hunt down in your father's swamp; have been trying to get there for two months." Of course I went, and I made the old swamp just ring. The first day I bagged twenty-seven birds, not all longbills, there were three partridges and five quail among them. Dash and Dandy backed up each other, and more than once did I lose them and find them still as a poker. JOHN FOX.

LAKE OKEECHOBEE.—Until lately little interest has been manifested regarding Southern Florida. With the influx of settlers and pleasure seekers, the region, made of interest by the Seminole war, is attracting more attention. The expedition of the FOREST AND STREAM for the exploration of Lake Okeechobee settled the disputed point about the extent of the lake, and whether it was accessible to anybody but an Everglades roving Indian. Coming down the St. John's River last April, I met a Major Allen, who still owns the little canoe, FOREST AND STREAM, left by the expedition on the shores of that inland lake. Major Allen has for several years lived near Okeechobee, and seemed well informed regarding its extent and surroundings. The shores of this lake, which is sixty miles long and forty wide, are lined with fine black and red mangroves, cypress and crabforests. Observation Island, long and flat and the resort of numerous wild fowl, is the largest of its islands.

Since the expedition of the FOREST AND STREAM, the solitude have been disturbed by a little steamboat, fifty-nine feet long, named the Mary Bell. Several times it has made the trip from near Lake Harvey, above Enterprise, down the narrow serpentine Kissimmee River, and around Lake Okeechobee. The excursionist, well provided with sporting materials, leaves the St. John's River steamboat at Tuscawilla, on Lake Harvey, and after a wagon ride of eighteen miles is placed on board the little steamer. Soon he is firing briskly away at alligators, ducks and deer, perchance surprised by the croaker. Flocks of cranes, ibis, gulls and curlews rise continually. There is no finer place in Florida for the taxidermist, eager for brilliant plumage and snow white plumes, than this newly opened region. When any desired game or bird is winged the rowboats from the steamer act as retrievers. As down the river you wind, going four times the distance in a straight line, new objects of interest are continually being disclosed. For ten days or two weeks the excursionist tires, only from the monotony of firing from morning until night.

The deer hunting is especially fine. The ranges are through regions seldom hunted, and where the noise of your guns often only awakens curiosity. Last winter, thirty miles from this region, I was surprised one day by a deer walking up to within thirty yards, and there standing looking at me, as much as to say, "Who are you? What are you doing here?" A little later I fired several rifle shots at two deer standing at about one hundred and fifty yards, without exciting anything but their perplexed curiosity.

It is not an unusual occurrence to see fifty or seventy-five deer during a day's ride through this region. Next winter another miniature boat is expected to be launched, so that trips can be made to Okeechobee twice every month. Okeechobee seems to be changed. An enterprising land company, in which some English capitalists are interested, have secured a charter from the State for the drainage of the Lake into the Gulf of Mexico. Between the Lake and the Gulf there is a fall of thirteen feet, which would drain two-thirds of the lake, as it is supposed. An outlet of about five miles in length has to be cleared through a swampsy swamp, and the water will gradually drain into the Gulf. Their object is to gain several millions of acres of rich bottom lands, and after gaining the State its portion to sell at reasonable rates alternate sections. This land, it is hoped, will be productive of tropical fruits and early vegetables, which the steamers will transport northward. Whether the scheme will succeed we cannot tell, but we do know that this region is one of the finest places for the hunter and inland fisherman in Florida.

"Firing from morning until night" from the deck of a steamer is not only monotonous but it is disgraceful and abominable. The captains of these boats ought, for the sake of decency, to put some limit to the cruelty of their passengers.

FLORIDA GAME NOTES.—*Gulf Hammock House, Otter Creek, Levy County, Fla.*—Florida, from present indications, will have an abundance of game this fall and winter. We are having fine bagging of quail, curlew and duck right in front of the house (Gulf Hammock House), but Captain Wingate has stopped the shooting of them until more guests arrive at the house. The guests that are here now are having fine sport with the delightful waterfowl. For our bear hunt the other day we started at 6 o'clock. We had a deer about a mile, and when we got there we found that the bear had left about an hour and a half before; but our dogs were eager for the fray, and so were we (six of us), and off we started. We had a run of some eight miles before the dogs brought him to bay in the top of a large live oak, and a very bad place for a shot. We concluded to let him have the contents of one of the cartridges out of a Henry rifle, which he began to wobble down like a bag of corn; he no sooner he began to wobble down like a bag of corn; he no sooner struck the ground than the dogs held hold of him, and made the same with them. One man in his excitement ran up and struck brass across the head with his fine Scott gun and completely ruined it, which taught him a dear lesson that brain's hard. We had to let the bear have the contents of one more cartridge out of our Henry, which finished him. When dressed he weighed a trifle over 300 pounds. We also brought in a fine deer with us. The Captain has secured one of the best bear hunters in this country, Mr. Watkins, with his pack of dogs. We will evidently have fine sport fishing and hunting this winter in Gulf Hammock. McF.

CHICKENS, DUCKS AND QUAIL.—*Milford, Neb., Oct. 8.*—I left Boston the last day of August. My first stop was at Worthington, Minn. My party consisted of myself and four dogs, and I had my hands full with the various changes of baggage-cars and baggage-masters. I spent the month of

September in Worthington and vicinity, bagging to my own gun three hundred and fifteen chickens, besides many mallards, teal, golden plover, etc. My shooting was done over puppies, and I had a great deal of bad weather, or my bag would have been larger. When I left Minnesota (Sept. 17) geese and ducks were coming into the prairie sloughs by the thousands, and by this time a lover of that kind of shooting could have all he desired. I arrived here September 29, I attend the field trials of the Nebraska State Association, a report of which has been forwarded to you, and I will make no comment, except that I was fortunate enough to win with my Dorr, a dog that I had not put in trim and had no intention of running.

I am now in a good quail country, making as good a bag as I care to tally. I can easily start ten to twenty coveys a day, but until the leaves fall from the trees in the "draws," very large bags cannot be made. I propose to work eastward in a few weeks, bringing up at Vincennes in season for the trials.

F. A. T.

SHARING IN CONNECTICUT.—*Tolland Co., Conn., Oct. 9.*—Wild pigeons are quite plenty this season; and they are wild, and I have not heard of but one large bag being taken. They feed early, then take the woods during the day. The town of Stafford seems to be their resting-place this year. Woodcock are scarce now—the summer birds gone, and the late birds not yet come. That is, so I have found it to be, the quail seem to be quite plenty but very much scattered, and in small coveys of 6 and 8. Partridges are plenty on the mountains and swamps in mid-day about Mansfield and Wellington; but they are most awfully snared, and their total extermination is not far distant. The Connecticut law, allows them to be so taken on one's own land, and the law is most terribly abused; almost any farmer allows boys to set snares on his lands, but will not let a decent man with a dog "kill all his game," as he says, showing his ignorance on the subject. The truth is, that he and his boys cannot kill a partridge with their old Queen's arms unless they get one sitting on a log. Snared birds are sold here, and in all towns about here, in total violation of the law. If there is a sportsman's club, or any persons in this State interested in this subject who will come here or back me up in this subject I will do all I can to stop this mean business of the dealers in purchasing these birds.

MARS.

MICHIGAN GAME NOTES.—*Ann Arbor, Oct. 9.*—On Thursday last, the 7th inst., Mr. J. Haskell of Bradner, Ohio, and myself met for a little hunting frolic for quail and woodcock and to try the grounds on the Toledo section of the Ann Arbor Railroad. Mr. Haskell brought with him his two favorite black-and-tans Ned and Sue, seven months old, to which he is strongly attached on account of their hunting qualities. The day was pleasant and the birds tolerably plentiful, especially the quail. We found a few woodcock in some of the wet grounds thereabouts, but they were scattered wild. The quail were in fair numbers for this portion of the country. Our best success was in the large beds of rag-weed that skirt the woods on the west of the railroad. The pups behaved beautifully and never have I seen prettier or better work done than was accomplished by those two pups: they countered, backed, dropped and retrieved all by motion of the hand in a style equal to the best trained old dogs that I ever saw. We made a pretty fair bag for this section, eleven quail and four woodcock. My great delight was to watch the movements of these young pups and see the charming work done by them. I was more than pleased at the splendid results achieved by their training, and Mr. H. tells me he has three more of the same litter almost as good.

We need a little more rain to make good cock shooting in the swamps and swales about here. Rabbits and squirrels are thicker than I ever saw them before, and when the first snow falls we shall try our beagles among these frisky little fellows hereabouts, when I will report results.

SEXEX.

WISCONSIN.—*Fon du Lac, Wis., Oct. 10.*—The shooting in this vicinity is now quite satisfactory, as ducks in great numbers have filled the marshes, and our sportsmen are improving the time to good advantage.

The deer hunters are also getting in motion for the coming season, that under existing laws closes Nov. 30. The old parties go out as usual, and there seems to be no alarm in deer hunting, not to be resumed, as we find them going out with the regularity of the seasons. Messrs. Carpenter and Adams will locate in the vicinity of Florence, Wis.; Mr. and Mrs. L. M. Wyatt left the R. R. at Waukegan, Mich., and expected to pitch their tent twenty-five miles away in their favorite location. Mrs. Wyatt accompanies her husband annually to the woods, this being her fourth season. She has all the enthusiasm of an old campaigner and is entirely at home among the wilds of the North.

S. B. and John Henry and Mr. Carter constitute the veteran organization and expect to locate in the vicinity of Hermansville, Mich.

All these parties go out well equipped and are usually successful, and we expect a satisfactory report at the close of the season.

You will excuse the style of this epistle as it is written on a tin plate twenty-five miles from any place.

Am in the wood and camp, am having fine days, good fare and plenty of game.

X.

ARKANSAS.—A correspondent of the *Germantown Telegraph* writing from White County, Ark., says of the game of there: "As this State contains much land which, on account of its swampy or its rocky or hilly surface, cannot be cultivated, the larger animals confine themselves mostly to these uninhabited districts, from which they make occasional raids into the settlements and make sad havoc among the farmers' calves and pigs."

"The deer and turkey have more impudence and refuse to quit the land of their nativity. They still occupy the fields, and even sometimes the gardens of the settlers. They being very fond of stock pens, the farmers must be very vigilant both night and day to protect their crops. Many are shot near by, and frequently several deer are taken almost within the suburbs of towns containing two thousand inhabitants."

"During the game season the boats navigating the White, Arkansas and other smaller streams, are loaded with such game as deer, bear, turkey, rabbits and prairie chickens, which serve to feed the citizens of the cities and towns along the Missouri river."

A HINT FOR PATTERN TRIALS.—*Boston.*—I wish to call attention to one thing that has no doubt caused many gunners to be dissatisfied at certain times with their guns. I saw a young man targeting his gun at 40 yards on pieces of paper 30 inches square and he was very much dissatisfied with it, say-

ing the choke was shot out, and blaming the gunsmith for deceiving him about the pattern, and vowing that he was going to get a new gun at once, etc. Having had considerable experience at targeting guns, I went and got some sheets of paper 4ft. square, and asked him to try his gun on them: which, after asking if I supposed he could not hold a gun on the "side of a house," etc., he reluctantly did; when to his surprise he found that the gun made a first class pattern, drawing a 30 inch circle from the centre of the charge, which, however, was not in the centre of the target by considerable. I speak of this, as I have often seen old gunners stick up a piece of board or a small piece of paper to test the pattern of their guns, and judge accordingly, no matter whether they held on or not; and many good guns have been hastily condemned on this account.

PLUYER.

BUNCHED SHOT.—*Newport, Ky.,*—As I consider chilled shot, especially Tatham's, to be superior to any shot made, I feel a lively interest in knowing how you can account for the wonderful performance recorded in your paper (Sept. 16, under heading "Bunched Shots.") I have used this shot for some time and am at a loss to understand how any loose shot can perform such feats. I have tested this shot in choke and cylinder bores and consider it but justice to the manufacturers to have this matter explained, as to me it seems impossible.

C. J. S.

The fault is not with the shot but with the gun. There is less reason for the bunching of chilled shot than of the ordinary shot, but some guns drop the pellets into a bunch. In the 1875 London Field Gun Trial one of the guns was barred out on just this account.

PENNSYLVANIA.—*Pottstown, Oct. 12.*—DEAR SIR: Our gunning season opens here on the 15th October. Partridges and rabbits are more plentiful this season than they have been for several years, and we expect lots of sport. Woodcock are scarce in our section of the country; squirrels more plentiful this season than they were last year, and also plover and pheasant. We have some very fine dogs here and plenty of sportsmen, but we have some very inconsiderate straggling hunters here, as they are not sportsmen nor even pot-hunters, for I heard of some that had been killing partridges last week, and have no doubt the same parties have been shooting the poor, skinny rabbits. There is a sporter looking after them, and if they are caught they will get the full extent of the law. I hope when the season opens the hunters will not go out and see who can kill the largest amount of game. As long as the weather is warm game is not in condition to kill, and if it is slaughtered up to the full during the first weeks, till the time comes that it would be in condition, you can scarcely find any. So a word of advice: Don't kill the half-grown birds or rabbits, as one a month later is worth a half dozen now.

J. W. E.

TENNESSEE.—*Savannah, Oct. 12.*—Although the shooting season has nominally begun but little has yet been done in that line. There have been a few times, but merely to train a promising young dog several times leaving the gun at home. Many of the berries I have found were too small to shoot, and the rank weeds will prevent anything like sport until a heavy frost comes to our relief. Birds are plentiful, thanks to a dry June. The farmers have an adage that a dry June always presages a good crop. I can't say about that, but know we always have more quail when there are no heavy June rains to drown the young birds and break up the sickening mud. There is an unusually plentiful crop of mallards, all kinds this fall, and in all probability pigeons and ducks will be here in unusual numbers. The weather is warm for any sport yet a while.

WILL.

WESTERN NEW YORK.—*Oswego, October 11.*—Season mild and flock-duck slow in arriving. The Ontario Hunting and Fishing Society have had some shooting upon their preserve. Red-head and black duck, and a few birds are killed along the coast. Within ten days game will be prime and hunting ditto. Squirrels abound in all the timber along the line of the lake (Ontario); the open winter of '79 and '80, and the abundance of nuts accounting for the same. Partridges moderately plenty. Within ten miles of this city, from 3 until 6 p. m., October 8, I killed two fine black squirrels and a cock partridge. Rabbits and foxes are in unusual numbers. Shooting grounds both for water and wood sport easy of access.

F. E. H.

CALIFORNIA.—*Elk Grove, Oct. 3.*—We are too far from you for information as to plenty or scarcity of game to be of much interest to your readers, but if you will give us a call you will find such acres of ducks and geese of all varieties, Canada geese, brant, white-fronted and snow geese, as well as Hutchings' brant—as can only be seen elsewhere in some of the Southern States. I will insure you a hearty welcome from our sportsmen. Deer are very plenty in the hills this fall, and with an occasional grizzly or California lion thrown in, a sportsman must be hard to suit who cannot find enough to content him.

W. L. W.

WEIGHT OF RUFFED GROUSE.—*Syracuse, N. Y., Oct. 18.*—I give below the weight of four ruffed grouse, the heaviest we have any record of in this part of the State: One, 1 11-16lb., killed by M. Knapp; one, 1 12-16lb., killed by C. Lansing; one, 1 12-16lb., killed by A. A. Hudson; one, 1 13-16lb., killed by Wm. Nicholson.

J. H. M.

We hope that sportsmen will send us through the fall the weight of their heaviest birds killed. Such a record would not be without value. The four grouse referred to by our correspondent were very heavy birds.

MIGRATORY QUAIL.—*Boston, Oct. 11.*—As regards the return of the birds, I say that many of my neighbors claim to have seen them this summer and fall, but they are hardly competent to judge, so I don't feel sure of it. The quail lay off on the 16th, and if they are here the gunners will soon find them, and probably shoot some before noticing the difference. A flock (heav) was seen about twenty miles below my town a fortnight ago. Probably some of those imported by Mr. Downer three years ago, and released then.

H. P. T.

INDIANA.—*Oct. 14.*—*Editor Forest and Stream:* The following leave for the Michigan Peninsula, on a deer hunt, the 21st inst.: W. L. Gregory, A. Wyson, R. W. Matthews, J. S. Stephenson, J. C. Kerns, J. Swope, R. C. Brown, Higgins and myself, of Lebanon, Ind.; and B. M. Gregory, Zionsville, and D. C. Burchard, of Indianapolis. E. M. Cox, L. Rains, S. Dougherty, E. Reynolds, A. D. McCormack

S. Daily and O. C. Witt expect to go a few weeks later. I will give you some notes of our hunt.

W. C. G.

FOREST AND STREAM GENERAL PASSENGER DEPARTMENT.—*Chicago, Ill., Oct. 14.*—The following parties have passed through here since Monday en route to the hunting grounds: C. Langdon, and party of four, from Ohio, going to Quin nisee, Mich.; Dr. C. Gifford, and party of four, from Indiana, going to Florio, Wis.; Isaac Case, and party of eight, from Illinois, going to Quin nisee, Mich.; Whetstone and Fisher, and party of twelve, from Indiana, going to Menomony, Mich.

SHOOTING AT THE ST. CLAIR FLATS.—Our correspondent, W. B. Willis, Jr., writes as follows about the shooting at this favorite resort. He says: "I had a good day's sport last Friday (Oct. 8) at the Club. Killed forty-seven ducks in the morning, and on my way home jumped into a cornfield with Star, Mack and Kink, and picked up fourteen quail after 4:30."

ONTARIO.—*Belleville, Oct. 13.*—Yacht owners now use their craft for conveying them to the marshes, a few mile distant, for the purpose of duck shooting, of which there has been but little as yet, the birds being scarce. Snipe and plover are, however, tolerably plentiful. In the woods game is fairly abundant. Some sportsmen have met with good success among the deer, and a considerable number of partridges (ruffed grouse) have been shot.

ALL AROUND NOTES.—*Yellow Bud, Ohio, Oct. 13.*—Just returned from an extensive trip through Kentucky, Tennessee, Arkansas, Missouri, Illinois and Indiana. Hunted some, but found game scarce. Killed some chickens—spurt hard to equal, when one has (as I have) a first class dog.

S. L. N. F.

OHIO QUAIL LAW.—*Columbus, Ohio, Oct. 16.*—You are mistaken when you say law on quail in Ohio is out Nov. 15, as it was changed last year to Nov. 1 to Jan'y 1. I give you this, as some may be able to come and have first of it.

F. F.

ROBINS IN WESTCHESTER.—*Superior's Office, Town of Westchester, Oct. 16.*—A law was passed Feb. 1, 1878, by the Board of Supervisors of this county, which prohibits the killing of robins during the month of October.

JAS. HENDERSON, JR.

SHOOTING MATCHES.

SPARTANBURG TOURNAMENT.

SPARTANBURG, S. C.

FIRST DAY.

Team match, from Card rotary trap, arranged to throw in any direction, 50 balls, 18 yards rise. Entrance, \$12.50, \$50 added by citizens of Spartanburg. First team to receive 50 per cent., second team 30 per cent., third team 20 per cent., after paying fourth team entrance fee and deducting cost of balls used.

Union.		Winnsboro.	
C. R. Robertson	8	R. J. M. Carley	8
W. L. Wallace	8	A. W. Wallace	8
J. D. Bourne	7	C. K. Rabb	6
T. R. Culp	10	J. W. McCaus	4
A. Irwin	9-20	W. H. Blasingame	8-31

Charleston No. 2.		Charleston No. 1.	
T. S. Inglesby	6	W. L. Culp	9
R. Chisholm, Jr.	6	T. T. Hall	10
R. B. Haskins	6	W. H. Blasingame	9
I. R. Read	8	W. R. Whitlen	9
W. H. Tarrant	9-40	I. H. Bonknight	7-45

Columbia.		Spartanburg.	
T. H. Gibbs	5	I. H. Bonknight	6
P. Booker	4	W. R. Nolen	7
M. C. Robertson	8	I. B. Patterson	6
J. W. McCaus	9	R. B. Haskins	6
W. J. De Treville	9-20	W. A. Heath	9-36

Scrubb Team.		Orangeburg.	
P. G. Cannon	6	P. B. L. Dorr	8
Geo. Kett	6	I. B. Jenkins	8
J. L. Kett	7	D. E. Smook	8
W. R. Whitlen	7	I. B. Bonknight	8
Wm. Anderson	9-25	A. S. Meyer	7-41

Result: Charleston No. 1, first prize, \$64.75; Orangeburg, second prize, \$38.75; Charleston No. 2 and Union, third prize, \$26; Columbia, fourth, \$12.50.

Sweepstakes—Six balls each, from Card trap; set on middle hole, throwing directly from shooter, 21 yards rise; \$25.00 entrance, \$25 added; distribution same:

R. L. McCaus	8	W. H. Thompson	6
W. R. Nolen	6	T. W. Danaher	6
R. Chisholm, Jr.	6	W. L. Culp	5
A. W. Wallace	6	T. T. Hall	6
J. W. McCaus	6	W. H. Blasingame	4
C. K. Rabb	6	B. B. Furness	5
W. R. Whitlen	6	T. H. Gibbs	5
B. H. McCaus	6	J. L. Kett	4
W. A. Heath	4	I. B. L. Dorr	4
C. A. Henderson	6	W. H. Tarrant	4
W. J. De Treville	6	J. L. Kett	4
C. R. Robertson	6	I. L. Berg	3
I. R. Read	6	M. C. Robertson	6

Ties were shot off, miss and out: First prize, \$42.75, won by W. R. Nolen with three balls; second, \$25.00, won by T. S. Inglesby with five balls; third, \$17.19, won by W. H. Tarrant with two balls; fourth, \$2.50, won by I. J. McCaus with two balls and one miss.

Team match, 30 balls, 25 yards rise; Card trap throwing straight away; \$10 entrance; first prize, one double Remington breech-loading shot-gun; second prize, \$30 in gold; third prize, silver pickle case.

Union.		Charleston No. 1.	
C. R. Robertson	3	W. L. Culp	5
W. L. Wallace	3	T. T. Hall	3
J. D. Bourne	1	R. B. Haskins	3
T. R. Culp	1	I. H. Bonknight	4
A. Irwin	1-9	W. H. Blasingame	3-15

Winnsboro.		Charleston No. 2.	
R. J. M. Carley	4	T. S. Inglesby	2
R. Chisholm, Jr.	4	R. Chisholm, Jr.	4
C. E. Rabb	0	E. E. Jenkins	4
J. W. McCaus	4	D. E. Smook	4
W. H. Blasingame	3-12	W. H. Tarrant	3-17

Columbia.		Spartanburg.	
T. H. Gibbs	5	I. H. Bonknight	2
P. Booker	4	W. R. Nolen	2
M. C. Robertson	4	I. B. Patterson	5
I. R. Read	5	I. H. Blasingame	6
W. J. De Treville	5-20	A. S. Meyer	1-21

Orangeburg.	
P. G. Cannon	4
I. B. L. Dorr	4
D. E. Smook	4

Spartanburg won first prize, Columbia second, Charleston No. 1 third.

Extra sweepstakes: breech-loading shot-gun; 5 balls: Dantzler 2; Tarrant, 5; Inglesby, 2; Jenkins, 4; Gibbs, 5; W. L. Culp, 4; Read, 2; Whitlen, 4; Anderson, 2; Furness, 4; Smook, 4.

The Kennel.

FIXTURES

MODERN COCKER SPANIELS

1—Total, 10; killed, 79; missed, 21.
Howell W. Rieckley.....1 1 0 1 1 1 0 1 0 0 0 1 0 1 1 0 1 0 1 1
1 1 1 1 1 1 0 1 0 1 1 1 1 1 1 1 1 1 0 1 1 0 1 1 1 0 0 1
1 0 1 1 1 1 1 0 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 0 0 1 1 0 0 0
0 1 1—Total, 100; killed, 69; missed, 31.

meadows or wood. He comes next to a human companion, for he is ever near you, and will seek you out; you need not hunt him. I entered my Josie at St. Louis as a King Charles; she was not grown, and I knew there would not be any full-blooded King Charles there; so I entered Josie and she took first prize, but they said, "Not a good specimen." Of course not; head too much like the setter, and that is the difference—head between the setter and the King Charles. The King Charles coker is a dog of many years ago, and the best and handsomest of the cokers as they should be. Not the King Charles of the present day—oh no!—but a much larger dog like the pure Burdett of to-day, and they are rare. To call such dogs as Whitman's cokers is a farce, they are merely handsome English spaniels, and all the spaniel family are handsome; but that does not make them cokers, and until they establish a standard based upon the real thing without yielding to any man's idea, why they will fail in making the coker the best, the prettiest and most useful little dog extant.

"Mr. O. A. Hubbard, of Stratford, Conn., imported Beau and Blanche, the sire and dam of my old Belle (dam of Josie). He gave \$900 for the pair, and they were the handsomest pair I ever saw or ever expect to see."

"A. C. WADDELL."

THE CARE OF DOGS.

BY EVERETT VON CULIN.

THERE is nothing easier in the world, unless it is cutting coupons off of Government bonds which are your own, than keeping one or two dogs in good health and condition all the year round; but when it comes to the matter of kennel management, safety and with regard to health, from six to twenty dogs of various ages, breeds, sexes, temperaments and conditions, nothing under the sun will enable you to succeed but experience. Not the mental experience gained from reading the great authorities—they are helps on the way, and no wise man will pass them unsearched; but the practical kennelman must study nature face to face. He must become thoroughly acquainted with the individual constitutions, habits and peculiarities of his charges; he must learn to detect the slightest change in spirit, appetite, coat, temperature of body, ears and legs; increase or decrease of temperature and moisture of nose; attitude while at rest; gait and carriage; condition of bowels; odor of the breath before eating, etc., etc.; for all they have their several distinct meanings, and the old proverb about "an ounce of prevention" was never more truthful than when applied to the care of dogs.

The first thing in order is a suitable kennel upon a desirable site. As I have carried out my idea of such a kennel at Lakeview, it may serve our purpose to describe it.

Lakeview stands upon an elevation on the western border of an irregular lake two miles long, and varying in width from one hundred yards to somewhat more than a quarter of a mile, and skirted by trees, bushes and a sandy beach. Bounded on the south by corn-fields and clover, on the west by a public road to Dover, and on the north by a cemetery whose northern and eastern boundaries are waters of the lake. This, you will observe, gives it the desirable isolation and privacy.

In the centre of the farm is the main kennel, a frame building with peaked roof, built upon a brick foundation 3 feet above the ground, and having beneath a basement cellar 6 feet deep. The building is 80 feet long by 12½ feet wide, and 16 feet to the eaves of the roof; over the sleeping rooms and running the entire length of the kennel is a loft for bedding and apparatus. This is in spirit, appetite, coat, temperature of body, ears and legs; increase or decrease of temperature and moisture of nose; attitude while at rest; gait and carriage; condition of bowels; odor of the breath before eating, etc., etc.; for all they have their several distinct meanings, and the old proverb about "an ounce of prevention" was never more truthful than when applied to the care of dogs.

Next to the sleeping apartment is a close room ventilated by a screened-lattice door and a roof space open between partition and ceiling and into an entry on the other side for bitches in season. Wires, of which I shall speak further on, are used for exercising these bitches.

On the south side is a yard 50ft. by 34ft. Inclosed by a 5ft. fence, from the top rail of which, leaning in upon an angle of 45 deg., and supported at the upper end by shingle lath struts and posts, is built another fence of plastering lath, 4ft. long. This is a *double* fence, for no dog ever attempted to climb or jump to its top. It cannot be improved by a horizontal covering of wire net. A flight of five steps leads to the sleeping apartment, another to the sand floored basement, where the dogs are admitted at will in very hot weather. A stout gate with chain and clasp fastening, leads out to another large yard in which stands the cook-house, a frame building 10ft. by 8ft., and 8ft. to peak of roof, and a large cast-iron kettle used in open air for boiling soup, mush, etc. On a terrace in this yard, which is 150ft. by 120ft., is built the dwelling-house of the kennelman; and running at liberty in the inclosure are puppies which cannot leap the ordinary pale fence.

Radiating from the main kennel, and occasionally shifted on new ground, are wires (some single and some double, to suit the strength of the dog), fastened at one end to a wicket made by setting two posts in the ground far enough apart to prevent the dog from going around them, and nailing slats between, and at the other end to a deep set post, beside which stands the individual kennel. A ring is slipped over the end of the wire before fastening, and into this ring is fastened one end of the chain; the chain is snapped into the ring of the collar and the dog has a free run the length of the wire (30ft.) and double the length of his chain in width. The wires are 2ft. from the ground.

These individual kennels or boxes will perhaps merit a description. They are made simply large and with a double screened roof and a porchlike roof over the opening in front. The box is cut in two, horizontally, a little above the middle, and made to slide the upper part forward to admit any degree of ventilation, and to shut perfectly close in wet or cold weather. The bottom is made separate, and may be removed for cleaning by lifting off the top. It is mounted on two pieces of 4x4 in. timber which keeps it dry and prevents its rotting. The whole arrangement is exceedingly simple and can be made by a handy man. It is so convenient to take apart, nothing being fastened by nail, screw, bolt or peg, and scrubbed and whitewashed inside and out.

Removed at a safe distance are other "private boxes" to be used for sick, exceedingly quarrelsome or fierce dogs. All

are within sight and sound of the kennelman on duty, and are visited at least once each hour during the day and until ten or eleven o'clock at night.

A sloping path leads down to the shore of the lake, where hitching-posts stand for holding dogs while washing, and a flat-bottom boat is kept to aid in teaching dogs to swim. Open fields on three sides give plenty room for more exciting exercises, and the surrounding country for real work on game.

The dogs are shifted about from general kennel and yard to small kennel and wire, private box or puppy yard, to suit the different circumstances and the objects and desires of the kennelman.

TREATMENT IN CASES OF POISONING.

ELIZABETHTOWN, Kentucky.

Editor Forest and Stream:

In No. 1, vol. 15, in kennel column, under head of "Treatment in Cases of Poisoning," after your good advice as to demulcents, emetics, etc., you specify the poisons and their antidotes, first naming arsenic and give its proper antidote; but would it not have been better to describe the quick method of making sesqui oxide of iron, as in some country towns the process is strange to the druggists. But my object in writing is to give you my experiments upon dogs poisoned by strychnia the most common mode of it dog poisoner. I will give you one case I had last week that is fresh, and it will serve to show the whole process. A friend called on me to ask if I could do anything to relieve his black-and-tan bitch that had got a dose of something. It being back of my office in the same yard, I examined her and found she had taken strychnine. I mixed up sixty grains of hydrate of chloral in milk and forced it down her. She had been in convulsions for ten minutes and looked as if dying. Was called out and returned in an hour. She still had convulsions, but seemed better. Gave sixty grains more of the chloral hydrate, and then, as I had nothing else to do, sat down and watched her. In a short time she appeared to grow worse, and was in such agony I gave her chloroform, which at once relaxed her and stopped the convulsions. I was then the first saw the effect of the enormous dose of chloral I had given. She shivered as if cold and lapsed into profound stupor. I then applied warm wraps to antagonize the effect of the antidote, and after getting her warmed up she began to get better. After watching her for an hour longer I left her asleep, and next morning found her well and hungry.

I have had several other cases similar, and have never failed to antagonize the poison with this antidote; but I would advise you not to thoroughly acquaint with both the poison and the antidote to consult a physician (I mean one who worships the healing art sufficient to include the brute creation in his humanity). Summary of this case: Saw her at 7 o'clock p. m., convulsions, gave hydrate chloral sixty grains: 8 p. m., better, but still had convulsions, gave chloral sixty grains; 8:30 p. m., convulsions worse, gave chloroform until effected relaxation: 9:30 p. m., chloral began to exhibit its relaxing effect, wrapped her in warm cloths: 10:30 p. m., left her recovered. Cannot make a more scientific report, for I don't know weight of dog or amount of poison taken, but I know death would have been speedy had not the remedy been prompt.

In phosphorus you should have said: Give larger doses of turpentine, as it forms a harmless compound in uniting with the phosphorus, and if the antidote is given in larger doses it purges the poison from the bowels. M. D.

The treatment of your bitch, suffering from strychnine poisoning, by chloroform, and hydrate of chloral was eminently proper to relieve tetanic rigidity and possibly lessen the number and force of the convulsions, which are so exhausting in their nature that the fatal result is likely to be in proportion to their frequency, beyond this we do not think these agents serve any specific purpose as antidotes. Bromide of potash, in large doses, is often given with the same end in view. In the treatment of poisoning by phosphorus we should have said to use sulphate of copper as an emetic freely. Oil of turpentine, to which you refer, is said to be very good, if old. Oils in general are bad, as they are solvents of phosphorus. In the treatment of arsenical poisoning the antidote hydrated sesqui oxide of iron can be extemporaneously prepared by adding aqua ammonia to dilute tincture of the chloride of iron.

WORKING DOGS ON RAIL.—We wish to express our hearty concurrence in the views expressed by "Horn" in our issue of last week on this subject.

We presume that all sportsmen who do much snipe shooting on the tidewater meadows of the Atlantic Coast have been annoyed by having their dogs point rails. These birds have been abundant on the meadows, and, as they give out a strong scent, attract a dog's notice at once. As rail refuse to rise until they are almost trodden on, they make the shooter a great deal of trouble, and confuse to the last degree a dog that is not accustomed to them.

We would never allow our dogs, especially if they are young, to stop on rail; they can easily be broken from this tendency if taken in time.

A LOST DOG RESTORED.—Boston, Oct. 15.—Editor Forest and Stream: I am happy to say that the notice of my dog having been stolen that you were kind enough to publish for me, has borne fruit, and I have recovered her. By good luck she had within a few days fallen into the hands of a Mr. Bruce, of Providence, R. I., a fellow sportsman and a gentleman, who, on reading the notice of her description, recognized her and telegraphed to me at once. Why would not such notices form a legitimate and a very useful source of income to your paper as advertisements? Everybody might not be as lucky as I have been, but if any dog, a sporting one especially, that had been stolen, were advertised by you, the chances of dog thieves selling their prey would be greatly lessened, and they might find the business less profitable.

I commend the wisdom of our correspondent's English in advertising his lost dog in the FOREST AND STREAM, and congratulate him upon the happy result. For the present we will gladly publish notices of lost sporting dogs free of charge.

POPE AS A CANINE AUTHORITY.—Washington, Oct. 11, 1880.

Editor Forest and Stream: In the FOREST AND STREAM of last week, I received from advance sheets of Vero Shaw's "Illustrated Book of the Dog," is the following:

"In spite, however, of the numerous families into which the setter is now divided, there can be no doubt that the origin of each was the spaniel, and it is a curious subject for contemplation that Spain (as will be seen in the chapter on pointers) should have the credit of supplying us with three breeds of sporting dogs—spaniels, setters and pointers—upon which we English so pride ourselves."

The use of the spaniel as a setting dog (*vide* Nicholas Cox) seems to have been understood by Pope. In his poem, " Windsor Forest," the following passage occurs:

"When wilder autumn summer's heat succeeds,
And in the new shorn field the partridge feeds,
Before his lord the ready spaniel bounds,
Panting with hope, he tries the furrow'd grounds:
But when the tainted game the game betray,
Crouched close he bends and meditates the prey;
Secure they trust th' unfaithful field beset,
Till howling o'er them sweeps the swelling net." X.

This method of netting birds is still employed in England by the pointers, who use the setter, however, instead of the spaniel. Possibly Pope availed himself of the poetic license to secure rhythm rather than canine accuracy.

IRISH WATER SPANIEL KENNEL.—Messrs. Whitman & O'Leary, with a desire to maintain the best kennel of Irish water spaniels in this country, have purchased the noted dog Barney for their stock dog. Barney was said by J. S. Skidmore, the celebrated breeder of this strain in England, to be the best dog of the breed ever sent to America. This is a valuable addition to their already fine stock, which contains imported Bridget; her daughter Lady, of the noted Sibbald blood; Barney II., with a fine litter of puppies by Barney out of Lady. A litter by Barney out of imported Bridget is soon expected.

A COMMON EXPERIENCE.—Granby, Conn., Oct. 18.—Editor Forest and Stream: The few times I advertised in the FOREST AND STREAM brought me in so many customers that I sold out everything I had to sell, and asked you to publish that I had sold all my dog pups, which you did. But that did not seem to do any good, for I had callers by the dozen since, and only a few days ago had calls for five dogs.

N. ELMORE.

—Mr. Christopher H. Burrows is the owner of a half bloodhound, which, to say the least, is quite sagacious. Last week his adopted daughter (to whom the dog had become a pet) visited Palmer, and while she was there his boy took the dog out hunting on Wilbraham mountain. The dog disappeared and the lad, supposing he was lost, returned home, without him, trusting to the brute's instinct to guide him home. But instead of being lost he had made for Palmer, where he found his former mistress that evening. Instead of receiving him cordially, she whipped him and told him to go home, which he did, and happily did, arriving at night and arriving in this city early the following morning, wet and dripping from the heavy dew.—Springfield (Mass.) Homestead.

IMPORTED DOGS.—In the steamship Wilton, from West Hartlepool to New York, October 10, 1880, a grand pointer bitch, by Wm. R. B. Summerson's champion Shot, and a Bedlington terrier puppy, by the champion Pinner, were shipped for the Westminster Kennel Club. The pointer, Polly is thoroughly broken and is a very handsome lemon and white. The Bedlington terrier is of the purest strain, with a pedigree through her sire Pinner, and also through her dam, Nancy Lee, traceable back to the year 1792. These dogs were selected for the club by Mr. Hugh Dalziel.

EASTERN FIELD TRIALS.—The judges appointed for the field trials are Mr. James Gordon, of Foxcroft Co., Me.; Dr. Rawlin Young, of Corinth, Miss.; Mr. R. Hewitt, of South Weatherford, Conn.; Paymaster L. H. Billings, U. S. N., Annapolis, Md.; Mr. Von Lengerke, West Hoboken, N. J., and Dr. J. C. Monroe, Brooklyn, N. Y.

STRAWN OR STOLEN.—Dr. J. W. S. Arnold, 739 Lexington avenue, New York city, writes us that his cocker bitch, Polly, a rich white, about six years old, has been spirited away from the above address. Any information concerning the dog will be appreciated by the owner.

ELKS AND BIDDY.—Mr. Tracy's painting of these famous Irish setters received the first prize, a handsome gold medal, at the Art Exhibition recently held at St. Louis, Mo. Mr. Tracy has had the painting photographed, and copies of same can be had of Messrs. Schuyler and Duane, No. 189 Broadway, New York city. The picture is a very beautiful one, and is a companion to those of Faust and Bow, and Keswick and Jessamine.

NOTICE FROM MR. HOLLS.—Hornellsville, N. Y., Oct. 12.—Editor Forest and Stream: I have this day withdrawn the services of my cocker stud dog Willard from the Hornell Cocker Kennel Club, and henceforth all communications must be addressed to me for service in the future.

BURR HOLLS.

NATIONAL AMERICAN KENNEL CLUB.—The annual meeting of this organization will be held in University Hall, Vincennes, Ind., on Monday evening, November 15, at 8 o'clock.

KENNEL NOTES.

NAMES CLAIMED.—North.—Mr. T. T. Phleger claims the name of North for English beagle bitch, whelped June 11, 1880, out of Lucy, by Mr. M. H. Jones, of London, of Jersey City, called the name of Yarrow for rough-coated Scotch collie puppy, out of W. Lindsay's imported Queenie by champion Rex. Winnie.—Mr. N. Elmore, of Granby, Ct., claims the name of Winnie for English beagle bitch puppy, out of J. X. Dodge's Belle by Ratler.

SALES.—Belle II.—Mr. Fred H. London, of Rock Hill, S. C., has purchased a rich puppy black and tan, by Dr. Allen's Glen out of Belle, and claims for her the name of Belle II.

PRESENTATION.—Lucy-Victor Whelp.—Mr. N. Elmore, Granby, Ct., has presented to Mr. T. T. Phleger, Pearisburg, Va., a fine English half-bitch beagle puppy out of Lucy by Victor.

WHEELS.—Belle.—Mr. Grafton's pointer bitch, Sensation-May, whelped Oct. 9, 1880, nine puppies, four dogs and five girls, by owner's white and black pointer dog Ned, Grafton's Jim-Whiskey. New litter brother to Sensation-May, whelped Oct. 9, 1880, three puppies, one dog and two girls, by owner's black and tan pointer dog, Sensation-May's brother, Frank B. Fay's pug bitch Dot whelped Sept. 25, six puppies, three

dogs and three bitches, by his Druid. Tort.—Mr. Frank B. Fay's fox terrier bitch Tort whelped Sept. 27, three puppies, one dog and two bitches, by his Sam Patch.

Breed.—Countess Gray-Coin.—Mr. Frank B. Fay's Countess Gray (Drake-Countess Vesta) to his Coin. Countess Maud-Coin.—Mr. Frank B. Fay's Countess Maud (Dash-Holly) to his Coin. Judith-Coin.—Mr. Frank B. Fay's Judith (Rob-Joy-Belle) to his Coin. Belle-Rocket.—Mr. Orgill's Belle (Flake-Lilly) to owners Rocket.

The Rifle.

AMATEUR RIFLEMEN.

THE Board of Directors of the National Rifle Association have finally worked out their purpose on what they considered to be the stupendous evil of professionalism in rifle shooting. After all it seems that they have been examining the subject through the wrong end of the microscope, and have been nipping at what they considered a bad, but which was never anything but a minor affair, and one which had small likelihood of growing to any greater dimensions. Of course the resolutions hit where they were intended to, personally and particularly, but then the N. R. A. managers should recall that they are legislating for the whole country, and to impose even one additional rule into what should be the single code of rifle shooting is to be avoided by all means. We would recommend to all donors of prizes to the N. R. A., that the provision "open to all comers" be attached to all gifts. It is certain that the merits and claims of this, that and the other rifle will be conspicuously and faultlessly pushed, all the resolves and definitions to the contrary notwithstanding.

The action of the Board was taken at a meeting held on Tuesday week, when the following were adopted:

"An Amateur Rifleman is one who has never entered into a competition for game money, or who has never pursued target shooting with the rifle, kept a shooting gallery, or manufactured rifles as a means of livelihood, or who has never been paid by any manufacturing firm or dealer in rifles, to use said weapons in matches for the purpose of advertising or selling them."

"Resolved, that on and after January 1, 1881, all matches of this Association shall be open only to amateur riflemen as defined above, unless otherwise specified, and excepting in matches open to teams representing regularly organized military or naval organizations; and amateurs only shall be allowed to serve, or to compete for places, upon any American Inter-state or International Rifle Teams to be organized by this association."

How the rule is to be applied in case of those professionals who are members of the National Guard does not appear. In matches thrown open to the National Guard, as the majority of them are, it will be a very risky thing for the N. R. A. officers to "go behind the returns," as it were, and sit in judgment upon the qualifications of guardsmen. Such a course might raise a serious conflict between the Creedmoor managers and some influential militia body.

The following protest comes from a gentleman whose record as a prize winner is second to none at Creedmoor:

New York, Oct. 16, 1880.

Editor Forest and Stream:

The action of the Directors of the N. R. A. in dubbing certain members of the Association "professionals," and excluding them from the matches at Creedmoor, is questionable, if the motive that prompts the action is to benefit the art of rifle shooting. The gun firms and rifle galleries have, I may say, been the making of at least two-thirds of the off-hand shooters that visit the range. How many men can be picked out from the off-hand clubs that can say they owe nothing of their knowledge of the art of rifle shooting to the shooting galleries or gun men? Even the two or three gentlemen who are leaders of the N. R. A. Directors by the way cannot dispute this point. And now to shut out these gun and gallery men from the matches, for fear they may win a few paltry prizes, shows the lack of judgment and of even the first business principles, which necessitates the advertisement by printed circulars to team captains and others the fact that the directors are being led into error to please a certain few. No one will dispute but a long array of cash prizes, if properly advertised, will bring strangers to the range.

If the N. R. A. was a truly national association—that is, the directors elected by all the State associations—their resolution would have some weight with other associations; but their action first, and then advertising for information after, stamps the resolution as the reflex of certain members of one of the prominent clubs in New York City that at present have the ear of the executive.

GEN AND GALLERY.

AN OLD RIFLEMAN SPEAKS.

Hudson, N. Y., October 4.

Editor Forest and Stream:

For the last two years my health has not been such as to allow me the use of my rifle successfully. But that doesn't deter me from reading your columns, and I do enjoy reading them as much as ever.

In looking over last number I again find that fault-finding and grumbling, in relation to off-hand shooting, is quite strong; and as more or less has been said about that graceful off-hand position, I thought I would give my views of it. The Shrewsbury Rifle Association accepts the rules and regulations of the Massachusetts Rifle Association, but objects to that fearful "elbow rest," and hopes to see it abolished. Now, it is really wonderful how some men will make themselves miserable while others are happy. They will never see this elbow shooting abolished. Their idea is no more popular than Dittmar powder at present. In Creedmoor's early days these arbitrary rules were more or less enforced, but now they have ceased to exist, except in the minds of new beginners and old eccentrics. Men have come to the conclusion to let little matters drop and get the ball on the bull the best way they can, and keep within reasonable rules. I mean to be understood that I do not speak in self-defense, for my shooting is done in other position.

Now, I would really like to know what difference it makes to any one whether he gets beaten by Farrow's little elbow or Jackson's leg extended arm. It doesn't help your shooting to handicap others. To become a good shot you must practice, hold and pull steady, keep reasonable hours, let tobacco and lager alone, and mind your business at all times. If you want to establish a reputation for

yourself in rifle shooting, you must meddle with others, find fault with everybody and everything that is done, but never with yourself. Then you may turn out a brilliant shot. And even then you may get beaten if you don't know enough to withdraw when you find your score is going to be low. Be very careful about going into team matches, because then you will have to shoot your score through. And if you have had luck you may yet spoil your reputation, as it has been demonstrated this year in England, and also at Creedmoor in the inter-State long-range match.

Now, Mr. Editor, the above is good advice to badly-used riflemen. I will now proceed to something else. I am informed that some find fault with Mr. Gerrish because he (G.) tied Partello's big score with ammunition that had been carried across the Atlantic and back. I don't think it fair for any one to grumble at that. Supposing Partello's ammunition had been soaked in salt water, I doubt his making another point and making a full score. I think both gentlemen excellent shots, and never find fault with their positions.

Mr. Gerrish has given valuable information of his fine shooting, and new beginners would do well to study all he says. But to me his letter is of little value. I am at the half-centre post, my eyes are getting dim, and the bulls-eye at 1,000 yards don't look distinct any more. If Gerrish or any one else could tell me how I could bring out that bulls-eye once more jet black and distinct, he would do me and perhaps others a favor that would be appreciated.

Yours, etc., L. GRONK.

SHOOTING WITH GLASSES.—Philadelphia, Aug. 20.—Editor Forest and Stream: I write you to see if you, or some of the numerous readers of your paper, can give the information I seek. I am very fond of hunting and anything that pertains to it, including shooting mark, but I'm what is termed near-sighted. I can't see plainly a bulls-eye the size of a flat dollar at seventy-five yards distance. In order to remedy this defect I purchased a pair of eye-glasses, but, on trying them, found to my astonishment that they caused me to shoot high. I got three other pairs of spectacles, and with the same result. I use a Winchester rifle, and at 50 or 125 yards distance, by aiming far at the bulls-eye, the ball will average five inches above it in line. The centist of whom I bought the glasses is unable to account for the displacement of the mark, or, I might say, the cause of the mirage. The only way I can see out of the difficulty is to get the rear sight lowered, but I don't care about doing so if I can avoid it, as it makes the opposite difficulty in shooting with the naked eye. If you or some of your readers can suggest some plan to remedy the trouble I will be thankful.

RANGE AND GALLERY.

PENNSYLVANIA RIFLE ASSOCIATION FALL MEETING.

CAMDEN, N. J., October 13.

The third semi-annual gathering of the Pennsylvania State Rifle Association was held with success on their shooting grounds the 11th, 12th and 13th insts. Good scores were generally made, the records standing as below. The details of the several matches were given in our columns two weeks ago. The Penn.

900 yards.		100 yards.		Totals.	
W. C. Crammer	9 8 10 11 12-52	12 10 11 10 11-56	100	10	10
J. Price	11 10 11 11 12-51	10 10 11 11 11-51	99	10	10
L. J. Sommers	9 11 10 11 12-51	10 10 11 11 11-51	99	10	10
M. Price	12 9 10 10 12-53	10 10 11 12 12-54	107	10	10
L. Thomas	9 9 10 11 12-53	10 10 11 12 12-56	105	10	10
W. C. Crammer	11 11 12 12 12-53	10 10 11 12 12-53	105	10	10
W. Fitzsimmons	11 10 9 9 9-48	10 10 11 12 12-57	103	10	10
G. W. Cardwell	10 9 9 11 11-50	10 10 11 12 12-52	104	10	10
J. H. Burroughs	9 10 10 11 12-51	10 10 11 12 12-51	103	10	10
T. W. Taylor	11 12 12 12 12-47	10 10 11 12 12-54	104	10	10
G. W. Dixon	9 8 10 9 10-44	12 9 10 11 11-53	100	10	10
H. S. Root	9 10 7 7 7-43	10 10 10 10 11-54	98	10	10

Mid-Range Team Match—Open to teams of four from association clubs. The following are the scores of the three teams entered in above match; possible for each man, 120; possible total, 360:

Quaker City Club Team.		Totals.	
Geo. Fox	12 12 11 11 12-56	9 11 11 9 9-49	103
M. Price	10 12 11 9 11-53	10 10 10 10 8-48	101
J. Price	12 12 9 12 12-51	9 10 10 10 9-49	100
W. C. Crammer	12 11 12 12 12-56	9 10 10 10 8-46	96
W. Zeiler	9 10 11 10 10-50	11 9 7 7 5-29	89

Mid-Range Team Match—Open to teams of four from association clubs. The following are the scores of the three teams entered in above match; possible for each man, 120; possible total, 360:

Quaker City Club Team.		Totals.	
A. B. Parker	12 12 11 11 12-56	11 11 11 9 12-11	117
L. Sommers	11 12 10 11 10-11	9 11 11 10 10-06	106
Harry Euston	12 10 12 12 12-11	11 11 11 10 10-12	112
W. C. Crammer	12 10 12 12 12-11	11 11 11 10 10-12	112

West Philadelphia Club Team.		Totals.	
Geo. Fox	10 10 11 12 12-56	10 10 11 11 12-94	104
J. Price	10 11 11 11 12-12	9 12 12 12 9-11	101
E. O. Shakespeare	12 10 12 12 12-12	10 10 11 11 12-116	103

West Philadelphia Club Team.		Totals.	
L. Thomas	10 11 11 12 12-12	11 11 11 11 11-114	104
G. B. Dixon	10 11 11 12 12-12	12 12 12 12 12-107	107
J. Tull	11 12 12 12 12-11	9 12 12 12 12-110	110
Geo. Miles	0 11 10 5 0	6 12 11 11 7-40	110

Sharp's Rifle Match—Shot in a very stiff breeze; wind blowing hard on several occasions:

Totals.		Totals.	
Geo. Fox	12 12 12 12 12 13 11-82	Geo. Fox	12 12 12 12 12 13 11-82
E. O. Shakespeare	12 12 12 12 12 12 12-81	J. H. Burroughs	12 12 12 12 12 12 11-80
J. H. Burroughs	12 12 12 12 12 12 11-79	Geo. B. Dixon	12 12 12 12 12 12 11-80
Geo. B. Dixon	12 12 12 12 12 12 11-80	J. Price	12 12 12 12 12 12 11-80

R. and J. Beck Match—Distance, 500 yards; possible 120:

Totals.		Totals.	
L. Thomas	12 11 11 12 12 12 12-116	Geo. Fox	12 12 12 12 12 12 12-116
A. B. Parker	12 11 11 11 12 12 12-113	J. H. Burroughs	12 12 12 12 12 12 12-113
J. H. Burroughs	12 12 12 12 12 12 12-113	W. De V. Foulke	12 12 12 12 12 12 12-113
W. De V. Foulke	12 12 12 12 12 12 12-113	Geo. Fox	12 12 12 12 12 12 12-113
Geo. Fox	12 12 12 12 12 12 12-113	J. H. Burroughs	12 12 12 12 12 12 12-113
J. H. Burroughs	12 12 12 12 12 12 12-113		

E. K. Tryon, Jr. & Co.'s Diamond Badge Match—Open to all members of association clubs; 100, 200 and 500 yards; seven shots at each; possible 252:

100 yds.—10		200 yds.—10		500 yds.—10	
Geo. Fox	10 11 11 11 11 11 9-75	Geo. Fox	10 11 11 11 11 11 9-75	Geo. Fox	10 11 11 11 11 11 9-75
E. O. Shakespeare	10 11 11 11 11 11 9-75	E. O. Shakespeare	10 11 11 11 11 11 9-75	E. O. Shakespeare	10 11 11 11 11 11 9-75
J. H. Burroughs	10 11 11 11 11 11 9-75	J. H. Burroughs	10 11 11 11 11 11 9-75	J. H. Burroughs	10 11 11 11 11 11 9-75
Geo. B. Dixon	10 11 11 11 11 11 9-75	Geo. B. Dixon	10 11 11 11 11 11 9-75	Geo. B. Dixon	10 11 11 11 11 11 9-75
J. Price	10 11 11 11 11 11 9-75	J. Price	10 11 11 11 11 11 9-75	J. Price	10 11 11 11 11 11 9-75
W. C. Crammer	10 11 11 11 11 11 9-75	W. C. Crammer	10 11 11 11 11 11 9-75	W. C. Crammer	10 11 11 11 11 11 9-75
L. Thomas	10 11 11 11 11 11 9-75	L. Thomas	10 11 11 11 11 11 9-75	L. Thomas	10 11 11 11 11 11 9-75
L. Somers	10 11 11 11 11 11 9-75	L. Somers	10 11 11 11 11 11 9-75	L. Somers	10 11 11 11 11 11 9-75
A. B. Parker	10 11 11 11 11 11 9-75	A. B. Parker	10 11 11 11 11 11 9-75	A. B. Parker	10 11 11 11 11 11 9-75
P. H. Karchus	10 11 11 11 11 11 9-75	P. H. Karchus	10 11 11 11 11 11 9-75	P. H. Karchus	10 11 11 11 11 11 9-75

(100 yds.—12)		10 12		10 12		10 12	
W. C. Zeiler	10 12 12 12 12 12 12-80	W. C. Zeiler	10 12 12 12 12 12 12-80	W. C. Zeiler	10 12 12 12 12 12 12-80	W. C. Zeiler	10 12 12 12 12 12 12-80
M. Price	10 12 12 12 12 12 12-80	M. Price	10 12 12 12 12 12 12-80	M. Price	10 12 12 12 12 12 12-80	M. Price	10 12 12 12 12 12 12-80
W. C. Crammer	10 12 12 12 12 12 12-80	W. C. Crammer	10 12 12 12 12 12 12-80	W. C. Crammer	10 12 12 12 12 12 12-80	W. C. Crammer	10 12 12 12 12 12 12-80
J. Price	10 12 12 12 12 12 12-80	J. Price	10 12 12 12 12 12 12-80	J. Price	10 12 12 12 12 12 12-80	J. Price	10 12 12 12 12 12 12-80

Ballard Match—500 yards, any position, rifle any, possible 120:		Totals.	
Geo. Fox	10 11 11 11 11 11 11-113	Geo. Fox	10 11 11 11 11 11 11-113
E. O. Shakespeare	10 11 11 11 11 11 11-113	E. O. Shakespeare	10 11 11 11 11 11 11-113
A. B. Parker	10 11 11 11 11 11 11-113	A. B. Parker	10 11 11 11 11 11 11-113
L. Thomas	10 11 11 11 11 11 11-113	L. Thomas	10 11 11 11 11 11 11-113
Geo. B. Dixon	10 11 11 11 11 11 11-113	Geo. B. Dixon	10 11 11 11 11 11 11-113
H. Mandersson	10 11 11 11 11 11 11-113	H. Mandersson	10 11 11 11 11 11 11-113

J. W. Quon Match—600 yards, 10 scoring shots, possible 120:		Totals.	
A. B. Parker	9 12 12 11 11 11 11-111	A. B. Parker	9 12 12 11 11 11 11-111
L. Thomas	10 12 12 11 11 11 11-111	L. Thomas	10 12 12 11 11 11 11-111
Geo. B. Dixon	10 12 12 11 11 11 11-111	Geo. B. Dixon	10 12 12 11 11 11 11-111
Geo. B. Dixon	10 12 12 11 11 11 11-111	Geo. B. Dixon	10 12 12 11 11 11 11-111

Subscription Match—Open to all comers; any rifle; 100 yards:

Seven scoring shots:		Totals.	
W. C. Zeiler	10 12 12 12 12 12 12-80	W. C. Zeiler	10 12 12 12 12 12 12-80
Dr. W. Cardwell	10 12 12 12 12 12 12-80	Dr. W. Cardwell	10 12 12 12 12 12 12-80
A. B. Becker	10 12 12 12 12 12 12-80	A. B. Becker	10 12 12 12 12 12 12-80

The "Record" Match—Open to teams of eight from association clubs; any rifles; 200 yards; seven scoring shots; possible 672. The following are the scores of the four teams that entered the above match:

Pennsylvania Team.		Totals.	
M. Price	10 12 11 11 12 12 12-80	M. Price	10 12 11 11 12 12 12-80
Major E. O. Shakespeare	10 12 11 11 12 12 12-80	Major E. O. Shakespeare	10 12 11 11 12 12 12-80
J. H. Burroughs	10 12 11 11 12 12 12-80	J. H. Burroughs	10 12 11 11 12 12 12-80
J. Fox	10 12 11 11 12 12 12-80	J. Fox	10 12 11 11 12 12 12-80
H. Mandersson	10 12 11 11 12 12 12-80	H. Mandersson	10 12 11 11 12 12 12-80
Geo. Fox	10 12 11 11 12 12 12-80	Geo. Fox	10 12 11 11 12 12 12-80
Geo. Wood	10 12 11 11 12 12 12-80	Geo. Wood	10 12 11 11 12 12 12-80
J. Price	10 12 11 11 12 12 12-80	J. Price	10 12 11 11 12 12 12-80

Westchester Team.		Totals.	
H. M. Worth	10 12 11 11 12 12 12-80	H. M. Worth	10 12 11 11 12 12 12-80
Geo. L. Cardwell	10 12 11 11 12 12 12-80	Geo. L. Cardwell	10 12 11 11 12 12 12-80
E. W. Taylor	10 12 11 11 12 12 12-80	E. W. Taylor	10 12 11 11 12 12 12-80
H. H. E. O. Shakespeare	10 12 11 11 12 12 12-80	H. H. E. O. Shakespeare	10 12 11 11 12 12 12-80
A. L. Smith	10 12 11 11 12 12 12-80	A. L. Smith	10 12 11 11 12 12 12-80
A. B. Becker	10 12 11 11 12 12 12-80	A. B. Becker	10 12 11 11 12 12 12-80
G. W. Miles	10 12 11 11 12 12 12-80	G. W. Miles	10 12 11 11 12 12 12-80
W. Fitzsimmons	10 12 11 11 12 12 12-80	W. Fitzsimmons	10 12 11 11 12 12 12-80

W. Fitzsimmons.....	6	10	6	7	4	12	9-54-10 1/2
Quaker City Team.							
W. C. Crammer.....	12	9	9	10	12	5	8-50
H. C. Euston.....	12	9	9	11	11	5	8-57
L. Sommers.....	12	9	8	9	10	9	10-00
Jas. Friend.....	11	8	12	10	8	6	5-50
H. H. Taylor.....	6	7	8	10	9	17	17-50
C. W. Zeibel.....	7	6	7	11	9	8	14-00
R. H. Grayson.....	7	6	6	6	11	9	13-50

Prize winners: First, Farrow, 81; second, Jewell, 81; third, Crane, 79; fourth, Brooks, 78; fifth, G. F. Ellisworth, 79; sixth, Richardson, 79; seventh, Charles, 79; eighth, Scutcher, 79; ninth, Dodge, 78; tenth, Habbeth, 76; eleventh, Frye, 76; twelfth, Max, 76.

Carton match, 900 yards:

J. S. Sumner.....6 6 6 6 6 6—41 4 Wilder.....6 6 6 6 6 6—40
W. Webster.....6 6 6 6 6 6—40 T. Howe.....6 6 6 6 6 6—38
Prize winners: First, Charles, 42; second, Gerrish, 41; third, Lewis, 41; fourth, Sumner, 41; fifth, Rockwell, 40; sixth, Habbeth, 40; seventh, Webster, 40; eighth, Wilder, 40; ninth, Jackson, 40; tenth, Brown, 40; eleventh, Farrow, 40.

Short-range team match, 200 yards:

Massachusetts First Team.
O. M. Jewell.....5 5 5 5 5 5—30
P. F. Richardson.....5 5 5 5 5 5—30
N. W. Arnold.....5 5 5 5 5 5—30
W. Charles.....4 4 4 4 4 4—24—232
Gardner Rifle Club Team.
P. F. Nichols.....5 5 5 5 5 5—30
J. S. Dodge.....4 4 4 4 4 4—24
J. C. Knowlton.....5 5 5 5 5 5—30
G. F. Ellisworth.....5 5 5 5 5 5—30
A. Matthews.....4 4 4 4 4 4—24—232
Massachusetts Second Team.
W. J. Jackson.....5 5 5 5 5 5—30
P. R. Souther.....5 5 5 5 5 5—30
J. J. Randolph.....4 4 4 4 4 4—24
L. W. Farrar.....3 4 4 4 4 4—19
J. N. Frye.....4 4 4 4 4 4—19—213

October 29 the New Bedford Rifle Team of ten men shot the men of the Raymond Sportsmen's Club, at Bellevue Range, Medford.

MAMMOTH RIFLE GALLERY. Boston, Oct. 16.—The second week in the inaugural Rifle Match, at the above gallery, has shown some remarkably fine shooting, and particularly the last part of the week. Mr. Pollard was nearly successful in getting the extra prize of ten dollars for a clean score of eight consecutive bullseyes. He made ten consecutive bullseyes, ending a score of 36 with three bulls, and starting a new score with seven bullseyes. The subjoined summary will show the standing of the several competitors to date. 50 yards; rounds, 8; possible 40; five scores to win, or possible 200:

Frank Hollis.....37 37 37 37 37—187
W. A. Pollard.....26 26 26 26 26—130
Geo. D. Edison.....35 35 35 35 35—175
A. C. Goodspeed.....35 35 35 35 35—175
Chas. B. Robinson.....34 35 35 35 35—174
Chas. B. Ous.....34 35 35 35 35—174
S. Pogg.....34 35 35 35 35—174
R. C. Sawyer.....34 35 35 35 35—174
G. Warren.....34 34 34 34 34—172
J. F. Wilhelmsen.....34 34 34 34 34—171
O. T. Hart.....34 34 34 34 34—170
B. H. Daley.....34 34 34 34 34—169
F. J. Snow.....33 33 33 33 33—166
E. Shumway.....32 33 33 33 33—163

A POETICAL WALL.

The Hyde-Halford fiasco, about which we have not been at all backward in echoing the opinion of every rifleman of prominence and the general feeling of the rifle world, has almost passed into a mere recollection. The indignation is simmering away as it comes to be understood that Englishmen gradually understand the situation. Up from the pleasant village of Flushing, on Long Island, where Hyde has a residence, comes to us the following effusion. Its pleasant irony is a relief after the bitter flings from the same source, and we print it as a pleasant finale to this unfortunate match:

THE MUG-HUNTERS' DETECTIVE.

"As finally made up, the Hyde team included Jackson, Laird, Scott, Brown, Hyde, Dudley, Gerrish and Rockwell. The representative American gentlemen, as they were proved to style themselves, have become a new party of mug-hunters."—Editorial *FOREST AND STREAM*, July 29, 1899.

Credmore "will be no place for mug-hunters, or those who shoot for the duce."—Editorial *FOREST AND STREAM*, Aug. 26, 1899.

Mentor of marksmen! Sporting sage!

We know it would be met

That every rifleman should bring

His trophies to thy feet.

Thou searcher into heart of man,

Though young, so wondrous wise,

The hidden motive thou canst scan

Of each who seeks a prize.

Avant! ye jugs, ye silver mugs,

Medallions gold and bright,

Ye deacons' roll, ye tempt the soul,

Heigh! presto! take your flight!

Jackson, forbear! Scott, do not dare

More than one prize to take!

Oh, Sumner, fly! Brown, do not try

Too many "bulls" to make!

Dread W—y sits, with boding glance,

Mug-hunter to decry,

And who that wins would dare advance

Beneath his scathing eye.

No, miss your targets, burst your guns.

Hit markers in the chin.

'Twere better far, the sage hath said,

Than silver mugs to win.

Archery.

HIGHLAND PARK, Ill., Oct. 11.—Arrangements have been made for shooting three matches, each of 96 arrows at 60 yards, between the Oakland Bow Club of California and the Highland Park Archers. Each club shoots on its own range and reports scores by mail.

The following scores were made in the first match, Oct. 2:

Highland Park Archers.
N. F. Swartwout.....23—29 25—119 23—131 22—100 59—449
Dr. E. R. Weston.....19—23 25—119 24—114 22—100 58—442
C. G. Hammond.....22—28 21—109 19—89 20—78 82—564
Grand total, 340—1,506.
Oakland Bow Club.
F. C. Havens.....23—29 25—119 23—131 22—100 59—449
R. J. Frye.....16—27 21—112 21—119 18—82 72—399
E. E. Cook.....18—75 16—75 15—102 19—91 72—346
A. F. Collins.....19—63 15—64 16—64 18—68 63—253
Grand total, 225—1,377.
Highland Park won by 45—212.

NEW YORK ARCHERY CLUB.

THIS club has now been organized one year, and in order to celebrate the event the first annual fall prize field meeting was held at the Archery Lawn, in Central Park, Friday, Oct. 15. Everything combined to make the event one to be long remembered. The weather was delightful, enabling the spectators to enjoy sitting in the shade of the club's tents, from which point they could witness the shooting the entire length of the field. There were twenty targets placed at sixty yards apart and the gentlemen shot the usual American Round, while the ladies shot the Columbia Round.

Everything passed off pleasantly, and the club, having prepared a good list of prizes for their visitors, made the occasion of more interest to those who came from a distance.

Invitations were sent to all the clubs in this vicinity, and representatives were present from the Brooklyn club, Nottingham Archers, Elizabeth: Toxophilite Club, Newark; Spuyten Duyvil Club; Riverside Archery Club, Chicago; Oriniani Archers, Hackensack; Cedarwood Archers, Poughkeepsie, and Robin Hood Archers, Nyack.

Miss E. T. Morton, of the New York Club, made one of the best scores recorded in this country, at the Columbia Round—viz., 337. After the shooting was over, the president presented the prizes to the successful visitors, as follows:

Mrs. Gibbs, Toxophilite Club, Newark, scored 281, and won a royalwood express rawhide-backed bow; Miss Braudage, Nottingham Club, Elizabeth, scored 266, and won half a dozen prize arrows; Mrs. Rutter, Toxophilite Club, scored 227, and received third, and Mrs. Dr. Bailey, of the Nottingham Club, took fourth and last prize, of an arm guard and tassel, with a score of 190.

The prizes for gentlemen visitors were distributed as follows:

Mr. Nash, Brooklyn Club, prize lancewood bow, score 418; Mr. Pettigrews, Brooklyn Club, half a dozen Granger's special arrows, score 408; Mr. Hayden, Spuyten Duyvil Club, target and stand, score 393; E. L. Morse, Cedarwood Archers, score 331.

In the evening the prizes worn by the club members were distributed, and the club enjoyed a re-union. Mr. Frazer took a spit bamboo bow, score 294; Dr. McLean, half-dozen Horsman's arrows, score 274; Mr. Anten, lemanwood bow, score 238; Mr. Roper, half-dozen arrows, score 242; Dr. Elliot, Horsman's patent handle gem bow, score 242; Mr. French, two bow-strings, score 228; Mr. Pond, score 207, and Dr. DeLuna, tassel and score book, score 186.

Miss Morton won the Columbia Badge, to be worn until lost, and also took a fancy table lamp with the score of 337; Mrs. Dr. DeLuna took rawhide-backed bow, score 230; Miss Howell took a beefwood bow, score 111; Miss Wren, half-dozen arrows, score 111; Mrs. Anten, half-dozen arrows, score 105; Mrs. Hill, pair of vases, score 102. The special prizes at 30 yards were won as follows:

Miss Manger, rawhide-backed bow, score 32; Miss Bailey, score book and string, score 17. The annual meeting of the club will take place Wednesday, Oct. 27, when new officers will be elected.

—We know *How Bitters* are above and beyond all as a nutritious tonic and curative.

Cricket.

FIXTURES.

Oct. 23—At Hoboken, N. J., St. Georges (2d) vs. Merion (2d).
Oct. 23—At Harkgate, Girard vs. Oxford.
Oct. 23—At Stenton, Young America (2d) vs. Girard (2d).
Oct. 23—At West Philadelphia, Belmont vs. Chestnut Hill.
Oct. 23—At Staten Island, Young America vs. Staten Island.
Oct. 27—At West Philadelphia, Belmont (2d) vs. Oxford.
Oct. 30—At West Philadelphia, Belmont vs. Germantown.
Oct. 30—At Stenton, Young America (2d) vs. Walfeld.

THE AUSTRALIAN CRICKETERS.

AFTER four months of severe work, which would have thoroughly incapacitated a less muscular team, the Australians have brought their second trip to England to a successful termination. It has been argued by some critics that their form during the last month was inferior to that shown during the earlier part of the stay, but it would be difficult to sustain this argument; and, indeed, when it is considered that the Colonials have not only been reduced to play without two of their very best all-round representatives, but on several occasions to bat with only ten men; and, further, when the amount of traveling they have done since the match at the Oval is taken into computation, it must be admitted that the show they have made in their later matches has only increased their reputation, certainly for pluck. Altogether the team have figured in thirty-seven matches, of which they have won twenty-one, drawn twelve and lost four. Of these twenty-six were against odds, the remainder with eleven on each side, and it is worthy of note that until their twenty-seventh engagement at Scarborough against a local eighteen, when they lost by ninety runs, and Spofforth unfortunately received an injury to his hand which incapacitated him for the rest of the tour, they had never been defeated. In some cases they had to meet strong eighteens, but of the twenty-six matches they were only defeated twice, at Scarborough and Spofforth, and against these were victorious at Southampton, Longsight, Rochdale, Burnley, Malton, Belfast, Birmingham, Northampton, Harkgate, Middleborough, Oldham, Crystal Palace, Hunslet, Bradford, Sunderland and Yealand, and drawn games at Keighley, Newcastle-on-Tyne, Broughton, Hull, Crewe, Hastings, Dublin and Glasgow. The eleven a-side matches were against Derbyshire, Yorkshire (2), Leicestershire, Gloucestershire, England, Sussex; Players (2), Notts and Gentlemen of Scotland; and of these Derbyshire, Yorkshire (at Dewsbury), Gloucestershire, Players (at Crystal Palace), Leicestershire, and Gentlemen of Scotland were one; those against Yorkshire (at Huddersfield), Players (at Bradford), and Sussex, drawn; and those against England and Notts lost. The matches against odds have little real interest, but a few statistics regarding the chief members of the team and their performance will be useful. Murdoch, McDonnell, Grange and Palmer were the only four who took part in every one of the thirty-seven matches played; but, in addition, Boyle, Blackham and Bonner were present in every eleven a-side match. In the latter Murdoch headed the batting average with 465 runs for nineteen innings (over 25.15); McDonnell was second, with 418 for the same number of innings (over 22.44); and Boyle third, of those who played on

every occasion, with 195 for fifteen innings (over 15). Bannerman, owing to an injured hand, was unable to take part in several of the later contests, and he only figured in seven first-class matches, though his average (17.9) was a very creditable one. Grange, who had a great home reputation, and who was accredited with an extraordinary Colonial average, neither showed style nor effect to warrant any great belief in him, and his sixty-one against Yorkshire was his only score of any note. Blackham, toward the close of the tour, was also suffering from a bad hand, and this will to some extent account for the fact that, though in all matches he has an average of 16.33 with eleven a-side, he falls to 13.10 runs for eleven innings. Spofforth's accident prevented his appearance in most of the principal engagements; and, consequently, in eleven a-side matches he only bowled 243 overs; taking forty-six wickets at an average of 8.28, while Palmer's eighty wickets were got at a cost of 11.14, and Boyle's thirty were for 15.31 runs per wicket.

The tables appended give the batting and bowling averages of the various members of the parties in all matches. Taking into account the immense amount of work that they have done it must be admitted that the form shown by this second Australian team has been exceedingly creditable. That they were able to bat the strength of England no one believed for a moment, but none the less the brilliant show they made at the Oval spoke very highly for their pluck, and were Spofforth able to help them they would have made a good fight at least at any time. Every one will be gratified that what threatened to be a rupture between English and Australian cricket was happily averted, and though the Colonials have even yet apparently failed to master some of the lessons necessary for a proper conduct of the game, it must be conceded that the general management of this trip was in every way superior to its predecessor. On Oct. 4 they dined with the Lord Mayor at the Mansion House and before eight o'clock on the following morning they left London for Brindisi, on their homeward journey. There is every chance, we understand, of another visit to England in 1892, and should some of the weak spots in the present team be filled by the substitution of men like Evans, of New South Wales; Massey, Moran and Garrett, the next lot will be sure to render a good account of themselves. By that time, too, perhaps cricket will have advanced sufficiently in the Colonies to permit the collection of an eleven able to play for their expenses only, if there should still exist the disinclination evinced by those who have already been over here to be regarded as professional cricketers. It is to their assumption of amateurism, accompanied with their exceeding keenness for money-making, that the Colonials owe the feeling that has been evinced against them in England.

BATTING AVERAGES IN ALL MATCHES.

Matches.	Innings.	Highest Runs.	Total Runs.	Average.
W. L. Murdoch.....	37	60	1,953	52.8
P. S. McDonnell.....	37	56	1,929	51.12
A. C. Bannerman.....	31	50	1,798	58.0
J. M. C. Blackham.....	35	47	1,678	48.23
G. J. Bonner.....	37	30	1,752	47.35
H. E. Boyle.....	35	47	1,653	47.23
A. H. Jarvis.....	35	45	1,619	46.25
T. U. Grange.....	35	51	1,680	48.0
F. J. Spofforth.....	28	35	1,294	46.21
J. S. Edgar.....	16	21	596	37.25
A. H. Jarvis.....	29	57	1,411	48.69
W. H. Mould.....	30	47	1,374	45.8
G. E. Palmer.....	37	48	1,283	34.7

* Not out.

BOWLING AVERAGES IN ALL MATCHES.

Matches.	Overs.	Maidens.	Runs.	Wickets.	Average.
F. R. Spofforth.....	139-3	667	2918	5.63	52.8
H. E. Boyle.....	146-3	681	1,820	23.0	79.00
G. E. Palmer.....	174-2	618	2103	20.8	101.12
G. Alexander.....	103-2	157	465	38	12.24
A. C. Bannerman.....	103-2	157	465	38	12.24
W. H. Mould.....	61-3	24	97	4	24.1
P. S. McDonnell.....	31	25	117	6	19.5
A. H. Jarvis.....	10	5	12	0	

W. L. Murdoch bowled in one match only—2 overs, 3 maidens, 16 runs, 1 wicket.

—One of the most remarkably interesting cricket sketches ever published appeared recently in the London *Illustrated News*. The subject was the match between the English and Australian cricketers. The artist was evidently totally unacquainted with the game, as the position of the fielders was absurd. One of the umpires was represented as standing between the wickets and almost all the men had their hands in their pockets.

—The mild autumnal weather has favored the cricketers in the East during the past month.

—Now that benefit matches are the rage it would be well for the St. Georges Club to remember that Giles should have his turn before the winter sets in.

BOSTON vs. FALL RIVER.—Played at Fall River, Oct. 14, and resulted in a win for the visitors. Score:

BOSTONS.		FALL RIVERS.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Pettit, b Watters.....	4 not out.....	39	
Lockhart, b Watters.....	5 not out.....	3	
Furniss, b Watters.....	0 not out.....	3	
Shaw, b Watters.....	1 c Nuttall.....	4	
McQuirk, b Watters.....	0 c Warburton, b Watters.....	1	
Bates, b Watters.....	1 Wides 1, byes 1, leg byes 1.....	3	
Haight, not out.....	Wides 1, leg byes 2, byes 7.....	10	
Total.....	29	Total.....	51
BOSTONS.		FALL RIVERS.	
First Innings.	Second Innings.	First Innings.	Second Innings.
Iving Clark, b Shaw, c Pettit.....	3 b O'Hare.....	1	
Nuttall, b O'Hare.....	1 c Furniss, b Shaw.....	15	
Warburton, b and c O'Hare.....	1 c Shaw, b O'Hare.....	0	
Hyde, b Shaw, c Furniss.....	0 b Shaw.....	0	
Whitgate, b O'Hare.....	0 Thrown out.....	2	
Holt, b Shaw.....	0 McQuirk.....	5	
Pomfret, b O'Hare.....	3 b W Shaw.....	1	
Watters.....	5 b O'Hare.....	7	
Wood, b Shaw.....	5 b Shaw.....	17	
Walton, b Shaw, c Haight.....	0 b Shaw.....	5	
Leg byes, 1; byes, 1.....	2 not out.....	5	
Total.....	18	Total.....	53

GILES' COMPLIMENTARY TESTIMONIAL.—George Giles has been tendered a complimentary testimonial subscription, and we trust that all those that remember the record of this excellent player and man during the past seven years will give the St. Georges list a hearty endorsement. As a cricketer, although no chicken, he is cock of the heap this season, heading the club's batting averages. In fifteen completed innings, including two not out, 346 runs were the proceeds of his list, or an average of 24 per innings. As a ground man Giles has no equal in this country, and his wickets are spoken of far and wide as where cricket can be played.

—The Manhattan Cricket Club are to be congratulated in having secured the services of Arthur Smith, late professional of the Peninsular Club, of Detroit. In addition, the president, Mr. James White, of the M. C. C., pleased with the success and increase of the organization under his fostering care, has promised to engage at his private expense, a second professional to instruct the junior members of the club. At the annual meeting held on Oct. 12, the following officers were elected for the ensuing year: President, Mr. James White; First Vice-President, Mr. Mackenzie; Second Vice-President, Mr. Matthews; Third Vice-President, Mr. Kirby; Fourth Vice-President, Mr. North; Secretary, Mr. L. Love; Treasurer and Assistant Secretary, Mr. S. Hosford; Committee, Messrs. Jackson and Jenkins; Match Committee, Messrs. White, Love, Hosford, Jenkins and Jackson. It was resolved that any member of the club who should play against his club, except in college, school or commercial eleven, should cease to be a member. The Manhattans will close this season's play November 2.

—George Lane, professional of the Staten Island Club, will take his annual benefit on Saturday, the match being the Young Americans vs. Staten Islanders.

UNLAWFUL BATS.—*St. Louis, Sept. 10.*—I have lately been measuring the bats of our cricket club, and I find they are all too wide. The laws of the Marylebone Cricket Club distinctly states that the width of the bat "shall not exceed four and one-quarter inches." I have measured the width of a number of Corbett bats and every one was of excessive width; one Corbett bat, "made expressly for an American dealer," is fully four and one-half inches in width, and very few of his bats fall below four and three-eighths. I do not wonder that the Corbett has been a very popular bat; I wonder whose make will be most popular and for what reason. The impropriety of such bats being admitted is obvious. I venture to say that were the blades of any club challenged that not one of those intended for full-sized bats could be admitted to a match; some boys' bats could perhaps be found, but no mous' sizes. If some action is not taken by the cricket clubs and associations concerning the legal dimensions of the bats, they will soon grow to be even wider than they are now. A player can have made for himself a bat that shall be six inches wide and play a defensive game simply, or compel his opponents to have their blades conform to the rule, for his bat would be no more illegal than one which is an eighth of an inch over width. Will you please call attention to this matter in your columns, and in so doing assist in publishing the game more uniform than is now the case?

[We take pleasure in publishing the above communication because we know the statement it contains to be a correct one. We have measured a number of bats recently, both in New York and Philadelphia, and found that many of them were much too wide. An extra quarter of an inch, whether on the end of a man's nose or added to the proscribed width of a cricket bat, is a matter for serious consideration. Let the American Association look into this, if it wishes to be considered a power in the land. Later on we may publish some remarkable facts, from which the cricketing public may draw their own deductions.]

COLUMBUS VS. CINCINNATI.—These two clubs of the Buckeye State met at Columbus, Ohio, and played their first match of the season, on Sept. 18, which resulted in favor of the home organization. Score:

CINCINNATI.			
First Innings.		Second Innings.	
F. Taylor, run out.....	0	b. Tyler.....	9
R. E. Stullard, b. Mine.....	14	b. Mine.....	0
M. Tandon, c. R. Hanford, b. Mine.....	0		
Walker, b. Tyler.....	0	c. Rhodes, b. Mine.....	4
Howe, not out.....	17	c. Little, b. Mine.....	1
Hay, c. Clark, b. Tyler.....	2	Run out.....	13
H. T. Taylor, b. Mine.....	3	c. Granger, b. Tyler.....	13
Clark, b. Tyler.....	0	c. O. Hanford, b. Tyler.....	12
C. Taylor, b. Tyler.....	0	b. Mine.....	1
Extras.....	13	Not out.....	0
Total.....	56	Extras.....	10
Grand Total.....	112	Total.....	23

COLUMBUS.			
First Innings.		Second Innings.	
Rhodes, run out.....	0	c. R. E. Walker.....	2
Granger, run out.....	0	c. and b. Stullard.....	2
Mine, b. F. Taylor.....	19	b. Walker.....	15
R. Hanford, b. Howe.....	3	b. H. F. Taylor.....	2
Collins, not out.....	2	b. Taylor.....	0
G. Hanford, b. Howe.....	0	c. Stullard, b. F. Taylor.....	0
Hutchinson, c. H. T. Taylor, b. Little, b. F. Taylor.....	1	Not out.....	0
Walker, b. F. Taylor.....	2	b. Howe.....	0
Tyler, b. Howe.....	0	b. Howe.....	0
Howe, not out.....	6	Not out.....	0
Clark, c. H. T. Taylor, b. Howe.....	0	To bat.....	0
Extras.....	5	Extras.....	6
Total.....	50	Total.....	52
Grand Total.....	102	Grand Total.....	102

ANALYSIS OF BOWLING.

CINCINNATI.			
First Innings.		Second Innings.	
Balls.	Runs.	Wickets.	Extras.
Mine.....	54	1	2
Tyler.....	19	2	1

COLUMBUS.			
First Innings.		Second Innings.	
Balls.	Runs.	Wickets.	Extras.
Tyler.....	53	15	1
Mine.....	49	19	2

CINCINNATI.			
First Innings.		Second Innings.	
Balls.	Runs.	Wickets.	Extras.
Stullard.....	75	0	0
H. T. Taylor.....	50	6	0
Howe.....	69	6	2
Walker.....	12	5	0
F. Taylor.....	19	17	2

COLUMBUS.			
First Innings.		Second Innings.	
Balls.	Runs.	Wickets.	Extras.
Howe.....	54	10	2
F. Taylor.....	54	9	0
Walker.....	21	6	0
Lalton.....	2	0	0
H. T. Taylor.....	39	12	0

TWO CELEBRATED CRICKETERS.—The White Star steamer Celtic, which arrived in this port on Friday last, had on board two of England's most famous cricketers, Messrs. R. D. and I. D. Walker. On their arrival they went to the Brunswick Hotel, where they stopped until Tuesday. Before leaving New York we had a pleasant chat with the former, whom we found in his room suffering from a bad attack of gout. Although this is the first visit of the brothers Walker to America, they were only prevented by sickness in 1872, from being members of the English visiting team of that year which came out under the captaincy of Mr. Fitzgerald. It will be remembered that E. Lubbock and Pickering at the last season filled their places. The Messrs. Walker are on a tour

of pleasure with New Zealand as their destination. They will visit Niagara, Chicago, Salt Lake City, sailing from San Francisco in about two weeks time.

—Parents, do not use vile drugs or nostrums in your families, but use pure Hop Bitters.

Yachting and Boating.

FIXTURES.

Oct.—Dorchester Y. C. Union Ocean Regatta.
Nov.—Royal Bermuda Y. C. Cruising Trim Race.
Dec.—Royal Bermuda Y. C. Cruising Trim Race.

THE SHUFFELDT CUP.

Editor Forest and Stream:

I send inclosed a photograph of the "Shuffeldt Cup," presented by Henry H. Shuffeldt, Esq., Vice-Commodore Ocononowoc Yacht Club of Ocononowoc, Wis. Engraved on the port side of boat is the following inscription:

HENRY H. SHUFFELDT,

V. C. O. Y. C.

September, 1880.

On the starboard side the following:

This Cup

Is to be Sailed for Monthly.

The Winning Yacht at each

Regatta

Shall fasten to it a Silver Coin,

Engraved with name and date.

It shall become the property of the Yacht winning it for the fifth time.

Along the side of the cup holes have been drilled to hang the coins from.

The first regatta for the cup was sailed Sept. 14. Yachts entered: Buda, Sunbeam, Sortie, Magic and Annie, all of them sloops. The Buda, owned by Ferd. W. Peck, Esq., of Chicago, won, with Sortie second, Magic third and Sunbeam fourth. The Buda holds the cup till the June Regatta of 1881.

The yachtsmen of the lakes exhibit so much spirit in adopting all the various phases of racing that the stronghold the sport has taken in the West argues well for its rapid growth in the future.



Eastern men are hardly aware of the large number of clubs and the numerous races established during the past few years on the fresh water seas. In some respects we might profit by their example. Measurement by all three dimensions, mixed rig races, and above all, free entry for all comers, whether they fly the club burgee or not; dying stars and valuable prizes are now predominant features of the sport in the West. The amount of cruising done in open water is more extensive than with us in proportion to the number of craft in commission, and is already exercising an influence upon the build of Western boats, and both cutter and yawl rig find favor in consequence.

REGINA-FANITA.

IT was unlucky that the match between these two sloops, sailed over the A. Y. C. course Oct. 15, should have come to naught on account of light and veering airs in place of the true winds of the fall. It was a mere matter of flukes all day, and the race was not even finished in the stipulated eight hours. There was not even a chance to compare the sailing of the craft with a view to drawing some sort of conclusions between the two. The match was governed by the rules of the Atlantic Y. C., with owners at the wheel, and mean length for measurement; the latter of course obliging nothing for bringing to the line an excess of beam and depth. In this particular match Mr. Stewart may have had so much faith in his fine vessel that, in order to bring about a contest, he was willing to abide by the handicap imposed by a faulty rule; but had there been any wind, he might have had to pay dearly for so obligingly accepting an illogical and very misleading mode of measuring size. It is in races between yachts closely matched as to performance and tonnage that the false logic of the length standard is most glaringly exhibited. Nor does it better matters to advance that the fairness of length measurement. And the race been close, within the margin of 3m., the cup and "glory" would have gone to Fanita, though in common justice both would have belonged to Regina. In other words, while the former was receiving an allowance from the latter for her excess in length, Fanita was paying absolutely nothing for bringing to the line an excess of beam and depth. In this particular match Mr. Stewart may have had so much faith in his fine vessel that, in order to bring about a contest, he was willing to abide by the handicap imposed by a faulty rule; but had there been any wind, he might have had to pay dearly for so obligingly accepting an illogical and very misleading mode of measuring size. 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land. In England, after a day's shooting, all the covers are gone over with retrievers, and the "cripples" either birds or ground game, bagged by the keepers. In water retrievers we find a large variety of mongrelism—Newfoundlands, setters, retrievers and spaniels, all mixed up together. Many of these crosses have produced wonderfully useful dogs. It is indispensable that all retrievers should have a tender mouth. 5. Yes. 6. There are plenty in the United States and Canada.

H. H. H., Fort Bayard, N. M.—Give your dog plenty of exercise, and a dose of sulphur each week. Feed carefully and not too much, and he is likely to come round all right.

W. K.—1. You should consult your physician as to best locality. 2. Cost of living in France is cheaper than in America, if one wishes to live moderately, but it depends altogether upon how one wishes to live.

H. B. D., Allany, N. Y.—Where can I obtain duck decoys in the city of Baltimore? Ans. Inquire of Clark & Snyder, 214 W. Pratt street, Baltimore. If they have none they will direct you to some reliable house.

H. C., New York.—We have heard of fine woodcock shooting at Sag Harbor, L. I. Take steamer W. W. Coit (fare \$1), Pier 25, East River, Thursdays, Saturdays and Sundays; or go by L. I. R. R. (to Wiggins' or Edwards').

H. L.—Have sent you the model, which will explain construction to your builder. You can vary from it to suit your ideas, but do not overlook the low bow forward, intended to obviate "pounding," which would scare the game.

H. C. B., Central Mine, Mich.—I sent \$5 for a watch to the Union Manufacturing Co., of Philadelphia, Pa., and failed to get any reply save a promise that it would be shipped. Ans. We know nothing of the firm. Write to the Postmaster-General.

W. L. W., Sacramento.—I. We shall be most happy to hear from you in the way mentioned. The FOREST AND STREAM invites all its readers to report game notes and kindred matters of interest to the fraternity. 2. We should not recommend the rifle.

PORT TRIPS.—I have a pointer bitch, not quite fifteen months old, that is now in season for the fourth time within six months. Is it not a very unusual thing, and is there any remedy for it? Ans. The animal is probably suffering from some local disease. Show her to a first-class surgeon.

MIGRATORY QUAIL, Chico, Cal.—If you are in earnest about the importation of quail next year, you will probably receive some help from those who have been active in making former importations successful. The birds, in some instances at least, have returned. Keep watch of our columns for news of them.

H. B. H., New Jersey.—Have you ever seen or heard of any pointers being pure lemon color? Ans. Yes, but not often. There was one at the Centennial Dog Show, and one at the New York Show, in 1879. Dogs of this color are rare. For shooting purposes their color is not a good one, as in the autumn they are very difficult to see.

H. B.—Would certainly advise a wheel for your 50ft. sloop. It too hard work steering such boats with a helm. Will send you address of best maker. For W. C. write to A. B. Sands, 126 Beckman St., N. Y., who can ship you everything complete, so that any local plumber or carpenter can set up. Duty will be about 25 per cent., but it is well worth paying it.

A. G., New York City.—My Gordon setter puppy has had distemper, but had apparently recovered from it. At present she seems to have a great weakness in her hind quarters. She is eight months old. Ans. Give one-eighth of a grain of nuxvomica and two grains of quinine in a pill, three times a day. Keep her out in the open air. Give plenty of exercise.

J. L. V., Nashville, Tenn.—My bitch has running sores in both ears, and it seems to grow worse. They seem to be far back into the head. I can see some of the ulcers very plainly. What shall I do? Ans. Your dog has internal canker of the ear. See treatment

recommended "H. W. H." and "C. B. D." in Answers to Correspondents in FOREST AND STREAM, Oct. 7, 1880.

F. H. L., Rock Hill.—1. What can I give my three-months old puppy to produce an appetite? 2. How many inches at fore-shoulder ought my puppy to measure? Ans. 1. Exercise and good plain food, given at regular hours—presuming, of course, your dog is in health. 2. There is no standard by which the height of a growing dog can be regulated, any more than there is for a three-year old child.

W. S. S., Canton, Mass.—A few days ago I was shooting ducks from a boat with a friend, and had my pointer dog with me. We fired several times, and when we came off the pond my dog was stone deaf. Can anything be done for the dog? Ans. The dog will probably regain his hearing—that is, if he had it when taken in the boat. You neglect to state whether your dog was allowed to retrieve or not. Pointers are apt to become deaf from exposure and cold.

S. T. R., Circleville, O.—1. Where can I obtain the best and purest strains of Blenheim and King Charles spaniels, and Maltese and Mexican pug dog? 2. What do you consider the best work on the dog, embracing natural history, breeding and training? Ans. 1. For the first three varieties you had better send to England; the "Mexican pug dog" we have never heard of. 2. Vero Shaw's "Illustrated Book of the Dog," published monthly by Cassell, Petter, Galpin & Co., 596 Broadway, New York City.

W. G., Medford, Mass.—I send you an insect that I found among the feathers of a barred owl. While searching for more, one flew from the breast feathers and struck my cheek like a No. 8 shot. Another flew away and could not be captured. Can you give me the name of it; also, some particulars? Ans. The insect which you send is the partridge fly (*Olfersia americana*), of which so much has been written in our columns. We should be glad to give you particulars, but through lack of space must refer you to files.

W. S., Waterbury, Conn.—I want to get a good gun, and want it mostly to shoot with in the Adirondack mountains—one that will kill a deer at a reasonable distance, and also be good for shooting around home. 1. What gauge, length of barrels, weight, etc., would you advise? 2. Is the shooting quality of a \$75 gun any better than those of a \$20 one, or is the difference of price in the finish of the gun? Ans. 1. We would recommend for general shooting a 10-gauge, 8 to 9 ft. gun, with 30-inch barrels. 2. The two may differ, only in finish.

M. H. B., Passaic, N. J.—Will you please inform me what is the best food for dogs two weeks preparatory and during the shooting season, to give them good, solid endurance? Also, whether crackers steamed and mixed with table scraps is good for regular food? Is it a good plan to put embers in the kennel yard to lard the dogs' feet? In my inquiry I wish to except prepared food. Ans. Mashed cooked hard is better than crackers to mix with table scraps. A dog being worked requires meat, and he should have larger feeds than when lying idle. Regular exercise is necessary for both man and dog before taking the field. The embers are very good, if not sharp enough to cut the dogs' feet.

ANXIOUS, Baltimore.—Always mustep mast and unship bowsprit if possible. White lead both, trice up in loft for their whole length or lay on a floor, so that they will not lose shape. Protect partners, steps, etc., from weather. Stow sails away, after thoroughly drying, where rats will not get at them. Take out ballast, clean and whitewash bulk. Block up clear of mud, protect all hardwood and deck fittings, and cover sunny side with burlap or matting, allowing for free circulation of air. Shore up well all around, and under counter, if long. Tally all gear and blocks. Shush all iron work, pins, etc., to preserve from rust, and line down all bright wood. Finally, visit often during the winter, and give an airing; sweep off snow, if not under cover; allow no leaks, if the seams open overhead.

A. D. E., Irvington, N. Y.—1. What is the size of the 200 yard range target at Creedmoor? 2. Is the plover a species of snipe? 3. Is it shot on wet, marshy meadows? 4. Do you think it would be

safe for me to purchase a broken setter at the auction sale of dogs advertised in your columns, i. e.: "Hitchcock & Hellyar's kennel draft, to be sold Oct. 27? 5. Is the duck shooting on Long Island good now? 6. Do they shoot them from batteries? Ans. 1. All distances up to and including 300 yds.—bullseye, circular, 8 in. diam.; centre, 26 in. diam.; inner 46 in. diam. 2. It belongs to the snipe family. 3. Some species are shot on wet meadows, others on the muckland and others on both. 4. We cannot recommend you either way. Some of the dogs to be sold are extremely good ones, but about others we know nothing. 5. Better later. 6. See game laws elsewhere.

NANTIC, Nanticoke, Conn.—Having for some years been an attentive and interested reader of the FOREST AND STREAM, I will take the liberty of asking you a few questions. When I first came up here striped bass were plenty, but, owing to a multitude of nets set by Long Island fishermen, they are yearly growing scarcer. Among the native fishermen but little can be done, but if one only knew how to set about it, perhaps our sport with rod and reel would not be entirely abolished. I therefore throw myself on your generosity, and ask for advice. A few good fish have been caught from the toll bridge, but so few and far between that it is rather discouraging business. I would also like to know why the fish take live bait up here when about New York waters shudder crab and lobster seem to be their favorite diet? I have heard many discussions on this subject, but desire some authentic information. Ans. We hardly know what advice to give you in reply to your first question, as you do not say whether the law allows such nets or not. The fish probably take shudder crab about New York in preference to live bait, because that is the food they are seeking; but when they reach your place they find more live food, and so take what they are accustomed to or learn by practice what food is in store for them.

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Single gut.....	1.50	1.50	1.50	1.25	1.25	1.00	1.00	1.00	75
Double gut.....	1.50	1.50	1.50	1.25	1.25	1.00	1.00	1.00	75
Twisted gut.....	1.50	1.50	1.50	1.25	1.25	1.00	1.00	1.00	75
Treble loops.....	1.50	1.50	1.50	1.25	1.25	1.00	1.00	1.00	75
Gimp.....	1.50	1.50	1.50	1.25	1.25	1.00	1.00	1.00	75

Numbers..... 8.0 7.0 6.0 5.0 4.0 3.0 2.0 1.0 1/2 1/4 1/8 1/16 1/32

CARLISE, ABERDEEN, AMERICAN TROUT, SNECK KENDALL.

Single gut.....	1.30	1.40	1.40	1.25	1.25	1.00	1.00	75
Double gut.....	1.30	1.40	1.40	1.25	1.25	1.00	1.00	75
Twisted gut.....	1.30	1.40	1.40	1.25	1.25	1.00	1.00	75
Treble loops.....	1.30	1.40	1.40	1.25	1.25	1.00	1.00	75
Gimp.....	1.30	1.40	1.40	1.25	1.25	1.00	1.00	75

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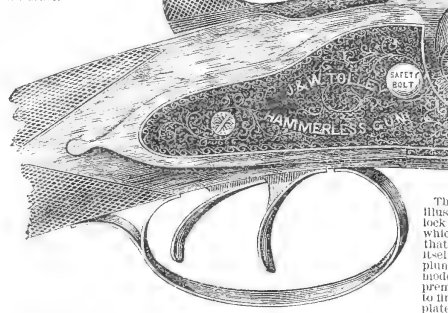
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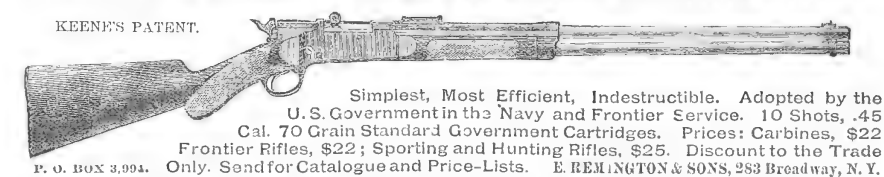
The side stud shown in the above illustration is thrown out on the left lock plate in opening the stud, and which projection of the stud shows that the automatic bolt has interposed itself between the hammers and the plungers. (The only perfectly safe mode of bolting the gun to prevent a premature discharge.) When about to fire press the stud on the left lock plate home, which unlocks the gun.

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"	"	"	"	100.	60
"	"	"	"	125.	75
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"	"	"	"	200.	110

Every Gun warranted. Sent C. O. D. with privilege of examination. Send for descriptive catalogue.

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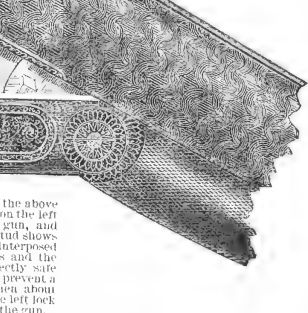
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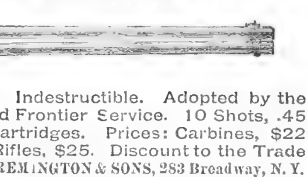
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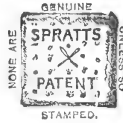
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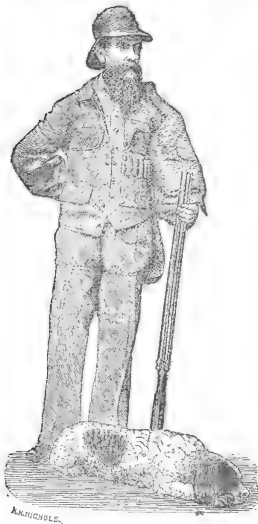
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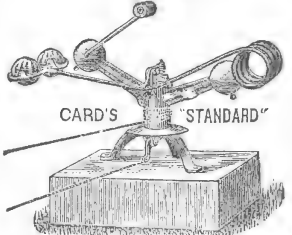
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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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THEY FAIL TO REPLY.

THERE was received at this office, September 29, the following communication:

NEW YORK, Sept. 29, 1880.

TO THE EDITOR OF FOREST AND STREAM:

Your article in the last number of your paper has been called to our attention, and upon perusing it, we find that you propose in your issue of this week to publish a further exhibit of matter of alleged affiliation, as a sequel to the interesting contribution to the literature concerning the Dittmar Sporting powder, which appeared in your issue above quoted.

We suppose that a sense of insecurity impelled you to intimate in the article that the columns of your paper, which theretofore (as you say) were open to us for explanations, would be henceforward closed, but being nevertheless convinced that, notwithstanding your enmity to our company, for reasons which we shall at length hereafter explain, you will not defy public opinion by permitting an invention of great public utility to be libelled and defamed in your issue, without giving us an opportunity to reply.

We shall reserve our answer to both your article and to Mr. Squires' letter, until the full extent of your charges are made known as promised. We desire however in order to avoid all misconceptions to unqualifiedly deny in advance of our extended answer, each and every statement in substance made in the article above referred to derogatory to the Dittmar Sporting powder.

Very respectfully yours,

DITTMAR POWDER MFG. CO.

This letter could be only one of two things. It was either what it purported to be, a notice given us in good faith by the Dittmar Powder Manufacturing Company (No. 2) that they had a genuine extended reply which they were really about to send to us, or else, having no such reply and being in desperate straits, they put forth this flat denial hoping that it might produce whatever effect attaches to bravado and bluff.

We accepted the more charitable of the two admissible constructions; and awaited the promised reply.

The occasion certainly called for an immediate and explicit answer from the manufacturers of the "Dittmar Sporting Powder." The "full extent of our charges" respecting that compound, as published September 23 and supplemented the week following by "a further exhibit" of most decided and unmistakable "affiliation," were of the gravest possible nature. They directly affected the public estimation of the powder, and unless contradicted at once, must, as the event has proved, seriously injure the sale of that product. The business interests of the Dittmar company were at stake. To preserve those interests a satisfactory and immediate reply was imperatively demanded. Under such circumstances it is incredible that, if anything could be adduced by them to disprove or offset our statements, it should be withheld from the public a single day.

We have waited five weeks. The "extended answer" has not come.

Instead of furnishing within this time any reply at all, the Dittmar Powder Manufacturing Company (No. 2) have, at so late a date as October 23, published their letter of September 29, prefacing it in a New York paper with the remarkable explanation that it had been sent to

"the Editor of FOREST AND STREAM as a preliminary answer to the hedge-podge literature on Dittmar powder published in their columns, which is the outgrowth of spite, revenge and ignorance, and intends to scare all those readers which [sic] have no thorough knowledge of different explosive compounds."

We submit that a full month was sufficient time for a more adequate answer to "the hedge-podge literature" which was "the outgrowth of ignorance."

With the exception of this exhibition of pitiable bravado, the Dittmar Powder Manufacturing Company (No. 2) have given to the public not one single syllable of reply to the facts and logic presented by the FOREST AND STREAM. Their silence can be construed only as the unwilling confession that they have absolutely nothing to say.

The letter of September 29, we are forced to conclude, was not sent to us in good faith as a notice of a forthcoming explicit reply. It was bluff.

As such, it was a fitting sequel to the long story of previous

* Each of these communications contains the best of internal evidence to conclusively prove that it was written in haste, if not in a passion. Upon no other theory can we account for a failure to emerge from the mazes of the second sentence of the Sept. 29 letter; nor for the extraordinary use here of the neuter pronoun.

denial and evasion already recounted by us, and as such it certainly calls for no extended consideration here.

We do not wish to prolong the discussion of the "Dittmar Sporting Powder;" the FOREST AND STREAM is not warranted in taxing the patience of its readers by dwelling upon dead issues.

In closing the subject we submit the following propositions, made with all possible brevity and clearness:

1. The question of the safety of the nitro-cellulose explosive compound styled "Dittmar Sporting Powder," is one which directly concerns the life of every man who may be induced by the representations of its manufacturers to use it. That each man so concerned may draw his own conclusions it is necessary that he should have the facts in the case, and all the facts.

2. The FOREST AND STREAM has presented the facts. The public, from Maine to Mexico, has from these facts drawn its conclusions. The evidence has been submitted. The verdict has been passed.

3. Wholesale denials, unsupported by facts, cannot alter that verdict.

4. One of "the statements in substance * * derogatory to the Dittmar Sporting Powder," was that of Mr. Carl Dittmar himself, and was made under oath. Something more than the unqualified denial of the Dittmar Powder Manufacturing Company (No. 2) will be required to induce the public to believe that Mr. Carl Dittmar under oath perjured himself.

5. We did not say, nor intimate, that our columns would be henceforward closed to reasonable explanations from the Dittmar company. We reserve the right at all times to decide what shall, and what shall not be printed in the FOREST AND STREAM, and we will never knowingly permit anything to appear in these columns which is intended to deceive our readers or to conceal from them the truth.

6. The editor of this paper has never had the slightest acquaintance, good, bad nor indifferent, with any one of the present manufacturers of the "Dittmar Sporting Powder." In writing and publishing the articles on the powder he distinctly disclaims having been influenced by any other motive than a determined resolution to get to the bottom of the subject, and then to publish the truth, fully, clearly and without fear. The charge that any one of these articles, or any single sentence in them, was inspired by "enmity" is ridiculously and maliciously false.

7. If an invention has been libelled and the libel can be proved there are certain well-recognized and approved courses of action whereby redress may be had for injury sustained.

GOOD WORDS IN HARPER'S.—The November Harper's contains a very readable along-the-shore article, entitled "Saline Types," which treats of people and things about which little is known by the general reader. It winds up with a few telling sentences on the rapid destruction and driving away of the water-fowl of the south shore of Long Island, and urges that steps be taken to protect these birds. The importance of some such action is becoming each year more pressing, and thoughtful sportsmen should turn their attention to this subject before it is too late.

In a revision of the New York game laws, such as is proposed by Mr. Crook, provisions protecting ducks and geese on their feeding-grounds and limiting the shooting to certain days of the week would, we think, receive the approval of most far-seeing men. Harper's says:

All along the Atlantic Coast the modern sportsman has introduced vicious methods. He is rather a persecutor than a hunter of wild fowl. His decoys lure the bird by day, and they are used to such an extent that the duck and wild geese with difficulty find a "sanctuary." At night the persecutor pursues his illegitimate sport under cover of darkness. "Blinds" also are resorted to in the daylight. In consequence of this devastation (in defiance of the game laws) the wild fowl is fast disappearing.

A WORD TO OUR READERS.—Every reader of the FOREST AND STREAM is requested to send us the names and addresses of such of his friends as are interested in field sports, but who are not among our subscribers. To all such we will send free specimen copies.

THE GAME LAW.—We hope that all who are interested in the New York Game Law will give the digest published in our columns last week their immediate attention, and communicate any suggestions they may have to offer to Mr. Crook.

FOREST AND STREAM.

NEW YORK, THURSDAY, OCTOBER 28, 1880.

* * * The FOREST AND STREAM goes to press Wednesday. Correspondents are requested to mail their communications so that they may reach us before that day.

A BOOK FOR EVERY SPORTSMAN.—We cannot too highly commend to the attention of all those readers of this paper, who (or "which," if you please) have no thorough knowledge of explosive compounds, the purchase and reading of Prof. J. P. Cooke's "The New Chemistry," (Appleton & Co., New York, \$2; or sent post-paid by us for the same price). We happen to know that many of our subscribers, among them the Fire Marshal of the city of New York, have upon our former recommendation, read the book with interest and profit. It is an admirably clear presentation of principles with which every man who uses a gun should be familiar.

PROF. MAYER'S EXPERIMENTS.—We take much pleasure in publishing to-day the first and only correct report of Professor Mayer's experiments to determine the velocity of shot. A garbled report was published by a Boston paper, and has been extensively copied, absurd typographical blunders and all, and many criticisms have been offered respecting statements that Prof. Mayer was alleged to have made, when in reality he had never said anything of the kind. The FOREST AND STREAM has received the article directly from its author's own hands, and the proofs have been submitted to him.

We need not dwell upon the practical value of these experiments, nor to the thoroughly able manner in which they were conducted. The article deserves and will receive careful study.

—The number of correspondents who contributed to our columns last week, including, also, those whose inquiries were answered, aggregated a total of more than 120, and represented twenty-six different States and Territories.

The Sportsman Tourist.

A TRAMP AFTER TROUT IN COLORADO.

THE Doctor was in camp in Estabrook Park on the Denver and South Park Railroad, which, at present, runs from Denver to Leadville. The small station-house is fifty-two miles west of Denver and stands near the north fork of the Platte. The north fork and the south fork of the Platte form a junction with each other ten miles below Estabrook, at a station called Buffalo, constituting quite a mountain stream, which, after discharging headlong over and around immense boulders, forming many charming pools and forming cascades, and forcing its way for ten miles through the picturesque cañons of the Platte, emerges upon the plain thirty miles above Denver and, after flowing northward and irrigating the numerous ranches en route, furnishes water to that thriving, bustling, beautiful young city. The Denver and South Park railroad follows the banks of the Platte to its source, taking up the north fork after reaching the junction. The scenery through which it passes, especially from the point where it enters the mountains to Estabrook Park, is perhaps equal in beauty and interest to any of the far-famed scenery of Colorado. The Platte cañon is decidedly attractive. The only drawback to a delightful ride through it is the fact that the road, following the various and often sudden crooks and turns of the river, keeps the cars continually on the swing, and fully one-half of the passengers, especially on the downward trip, get seasick. In many places the mountains come down abruptly to the very brink of the river and the road bed has been blasted out of the solid rock. Half of the time it appears that the road terminated within a hundred yards both behind and before you, so very crooked and narrow is the gorge.

One Saturday morning early in August last the Madam and I boarded the regular train for Leadville, taking with us the five-year-old, and ran up to see the Doctor. He met us at the depot and escorted us up to his tent near that of Mrs. Knier. The Doctor and we went to the East, where we were out for their health and with whom the Doctor took his meals. The Doctor was an invalid himself and spent his time principally in eating, sleeping, drinking in the glorious air, and whipping the river for trout. The park was a lovely little strip of table lying along the river on the south, carpeted with mountain grass, backed up by a forest of pines stretching away up the graded mountain slope, with the more irregular and abrupt peaks and crags rising to the north. Several families from Denver were here living in tents that were pitched at the edge of the pines overlooking the narrow plain, the sparkling river, the railroad and the enchanting scenery beyond. The Madam was so infatuated with the place before she had been there two hours, and after seeing how saucily people may live in tents, that I became apprehensive I would have to part with her and leave her in the park. The dinner served up to us at four o'clock was devoured with a keen relish, not the most insignificant part of which were a dozen or so of trout, captured by the Doctor that very morning. On our arrival he told us he had been trying his hand with moderate success, but that a heavy rain up on the headwaters of the river had sent down murky water and in a measure cut off the sport. Still, as I wanted to try my hand, we got our rods and walked down to the river. I did not fancy telling it, but as truth is said to be stranger than fiction, I will record the fact that we both used the worms for bait. The Doctor, in the existing condition of the river at that time we might have expected to catch them. Our arms and backs ached and had only those aches for our pains, but with the worms we were enabled to add one each to the morning's catch. During our operations a mountain shower came up, but the Doctor's big umbrella covered us both and enabled us to prosecute the sport.

"They tell us," said the Doctor, as we sat at the table at dinner, eating as though our hotel at Denver had been keeping us in short ration, "that trout are scarce and scarce to stream here in Goose Creek just above its junction with the south fork of the Platte, and a party of us are going over there next week. We want you to join us. We are going next Tuesday, and if you will say you will go along we'll wait the arrival of the train and have some means for your conveyance. We are told it is seventeen miles distant and we think we can get there after the train comes in and fix a place to sleep before night."

"What! What! What! I do promise to join them at the appointed time? So, after receiving a few small commissions to fill, such as buying a few flies, some canned goods and laying in a supply of worms (the latter of which can be had in all Colorado only in Denver), the Madam, the five-year-old and I boarded the down train at seven o'clock and were soon turning and twisting and grinding our way down the tortuous road, and before we reached the plain two-thirds of the passengers were sick. The Madam had taken charge of the five-year-old, who soon started us with the remark, "Ma, my head feels so funny;" and directly afterward found relief in slumber. It was not long thereafter when the Madam herself was stricken. Turning to me with a look with which I became familiar in a rough ocean voyage not a thousand years ago, she said, rather sorrowfully, looking down at the little sleeper, "You'll have to take her. But raise the window first. I'm so sick!" None of the sick ones found relief till we got out upon the level plain and sped away smoothly and rapidly for Denver, which we reached at half past ten that night.

At noon on the appointed day I stepped off the train at Estabrook Park and was greeted by the smiling face of the Doctor. "We are all ready," said he, while shaking me cordially by the hand. "Over yonder by that slab-house you will find Mr. Higginson waiting for you with his wagon. Mr. Holme and I will not be gone on in the dog cart, and the Dean and I will ride horseback." On my way over to the slab-house I fell in with the Dean, who had been somewhere down in southern Colorado attending to the interests of his church and who had come up from Denver on the same train with me. Higginson and I were urged to lunch with him before starting on our journey, an invitation quite acceptable to me, as my appetite was already beginning to get the better of me. What they termed lunch proved a real good dinner. As soon as it was dispatched we had our saddles on and were on our way, and taking a spring seat by the side of Higginson, we started across the mountains, the Dean mounted upon a tough broncho, while the Doctor bestrode an ancient, rambled horse, born and bred in the mountains, and which could follow a trail with the accuracy of a deerhound on a fresh scent. The road, for the greater part of the journey, was quite rough, and occasionally the men in the dog-cart, which we soon overtook, and I had to follow. Seven miles out we came to Higginson's ranch. Here we found a small cabin, the upper end of a little valley nestled down among the towering mountains, recently purchased by the owner on his arrival from England, and occupied by himself, mother and sister. They were cer-

tainly comfortably situated, but not greatly troubled with neighbors or visitors. After a slight rest, and partaking of a goodly supply of ice-cold fresh buttermilk, we continued our journey five miles further to Mr. Webster's ranch, where both road and civilization terminated. It was then five o'clock. After unloading our traps, Higginson returned to his home. Webster and an old man in feeble health, who had charge of the house and did the cooking, were at home. Webster offered us shelter for ourselves and grazing for our animals, advising our remaining with him over night, saying there was no special trail road to Goose Creek, and that we might not find it alone, but that if we would defer our journey till morning he would escort us part of the way. He said the distance was five or six miles. So we voted to stay there all night and make an early start in the morning. After broiling our meat and making some coffee on the stove, and chatting with Webster till far into the night on the chances, among other things, of the success of our expedition—of which he was by no means sanguine—we all piled down on the floor, and soon fell asleep. Two of our host's herdsmen had come in after a long tramp "rounding up" cattle, each bringing with him a large supply of blankets and buffalo robes packed on horses, separate from those they rode, and this bedding they turned over to us, which, added to our own stock, made the night on the floor fairly comfortable. The Dean found the naked McCellen, a young fellow, for a pillow, but a pair of new, soft overalls, belonging to one of the herdsmen, when rolled up, served my purpose admirably.

We were up betimes next morning, and got our simple breakfast. The Dean and I started out at once in advance. He carried a carbine in the hope of seeing a deer, but came no nearer a shot than seeing some fresh tracks. Such a walker! He kept me at the top of my speed all the time, my wind could not sustain it, and the perspiration rolling off me. When I would beseech him to moderate his gait, he would declare he thought he was walking very slowly. I had seen Englishmen trudging up and down the mountains of Switzerland, and was aware they were good on foot, but I had never had such a realizing sense of it before. The horsemen soon overtook us, accompanied by Mr. Webster. We went down this gulch and up that one, crossed spurs of mountains here and there, until, a mile and a half out, we came to a great ridge overlooking a vast stretch of level country, and we were at Elk Peak sixty miles south of us, but really appearing ten or twelve miles at farthest.

"We will stop here," said Webster, "and I can point out the way. Make for those naked bluffs you see yonder. That dark line you see below us is Wigwam Creek. This valley to the left leads to it, and you cross it. After crossing, bear off to your left at an angle of about twenty degrees, and so upon the ridge; follow the ridge, and you will come to the foot of Sand Gulch; turn to your right and go down that about half a mile, and you will strike a beaver dam on Goose Creek about half a mile from its mouth. But—"

"Hold on, Mr. Webster," cried the Doctor, who had been so enchanted with the panorama spread out before us that he had not heard a word of the directions, "go over that again, so we may all understand it. We don't want to go meandering about and about and lost."

And Webster carefully detailed the route, so it was plain to all of us, and then bid us good morning. We had no trouble in following his directions, but found the distance at least eight miles instead of six. We reached Goose Creek at half-past eight o'clock, and the first signs of life, save an occasional grasshopper, that greeted our vision were some kingfishers flitting up and down the little stream.

"They are here!" There he was! I exclaimed, overjoyed that the tireless pursuit was ended, and feeling sure these birds would not be about unless fish were present.

By nine o'clock we had the horses picketed out on the grass in the narrow valley, and were trying our hands with the trout. The Dean and the elder Mr. Holme were both expert fishermen, and turned up their noses at worms. They used all flies, of course. The Doctor and I compromised by putting worms on the lower hook and a brown hackle or other fly on the upper. The Dean and the elder Mr. Holme, followed by the Dean, the Doctor and I, having but one basket between us, going together and bringing up the rear. Of course we fished over their ground and within half an hour after them. Holme was the first man to wet his fly, and he had barely wet it ere he was lunged at. "First blood!" holding up a three-ounce-pound trout. From that on till we reached the Platte, barely half a mile distant from camp, it was a case of "who's in the lead." The elder Mr. Holme caught two at once, one on each hook, and he expected every member of the party had that morning. Only a few, but those all large, rose to the fly in the Platte. Owing to the river entering an impassable cañon just below the mouth of Goose Creek, we could not give the Platte a fair trial. But we were satisfied with the creek. We returned to camp a little before noon, cleaned our fish, hung them up in the grass in baskets, and prepared our dinner, for which we were well supplied. The work was not light. We had taken 108 trout, some of them weighing over one pound, and not counting the smaller ones thrown back into the stream.

After dinner and a good long rest the younger Holme, the Doctor, myself and the elder Holme, in the order named, went up stream, while the Dean went down, returning early to prepare camp for the night, and bringing with us, as the result of the afternoon's work, 144 trout. We were all very tired. The work was not light. The banks of the creek were precipitous, often with great boulders as large as a house, and as none of us had wading boots, we were frequently compelled to leave the stream and make our way along the rugged mountain side in order to reach it in another place. That night we made our bed down on the sand, under a big pine, with a roaring fire at our feet, which was kept going by Holme, who, sleeping on the outskirts, got cold every hour, and was compelled to get up and stir the fire. We had taken 108 trout, some of them weighing over one pound, and not counting the smaller ones thrown back into the stream.

The next morning Holme, the expert fisherman, started alone at five o'clock to make the railroad at noon to meet some friends en route for Leadville. We filled him before he started with a nice hot breakfast, loaded his horse down with two big baskets of trout, and gave him our benediction. Soon after this the others were devoting their attention to the trout. This attention was continued till near nine o'clock, when we had returned to camp and prepared to start on our journey in this little 103 trout. The entire time devoted to fishing was a little over nine hours, the total result being 355 trout. Of these the writer led with 97, followed by the Doctor. I am certain that the Doctor and I would have done better if toward the close our worms had not given out and driven us to rely solely upon flies. During the use of worms we captured one trout with the fly to about seven or eight with the hook baited with worms. It was an unprofessional way of fishing, but the silly mountain fish seemed to like it, and we were disposed to humor them.

As I had to foot it back to Webster's, and the Dean was too much for me on an even race, I concluded to start ahead, and go it alone and take my time. I did not want my bearings pretty closely the day before, and felt I could make it. I did well enough up the Sand Gulch and along the ridge, but I lost the turning-off place to go down through the pines to Wigwam Creek, and became confused over certain peaks I had marked in my mind the day before. I had gone so far I was fearful the horsemen behind me would not pass that way, and I made for the creek at a venture. I struck it in a strange and odd looking place, without anything to indicate whether I was above or below the crossing of the day before, which I had marked by thoroughly blazing with a hatchet a young aspen tree. I walked up the bank of the creek where walking was specially bad half a mile, and finding the country growing wilder, retraced my steps and went down, growing more nervous and uneasy every moment. I was without a coat and without needles, and found at night in the mountains. Once or twice I caught myself nearly in a run. But finally I saw the blazed tree, though it looked like some other tree, and I could hardly believe my own marks. But here were the prints of the horses' feet at the crossing, and I plunged over, and from that on I stuck to the fresh tracks like an Indian. I was particular to step right in them, and I would not deviate from them two feet, even to cut across a sharp turn. Even when I reached the branch that I knew crossed by Webster's house I could not tell sure of it, and the sight of his house across the green pasture, as I emerged from the pines, was certainly very gratifying to me. I got in an hour ahead of the rest of the party, about exhausted. When they came up we had lunch, and started for the railroad. Having but two horses, three of us rode on the one seat in the dog-cart, with traps piled up to our eyes, and strapped all around us. There was very much of the "ride and let it out," and all fish Panamanians were slow. At Higginson's we took on some more buttermilk and borrowed another horse. From that on to the railroad we went flying, arriving at dark and finding a nice warm supper waiting us at Mr. Holme's tent, presided over by his accomplished daughter.

I think our luck was exceptional. Trout are not very abundant in Colorado and only offer great sport to the angler in remote places. Every stream easily accessible to the tourist is full of trout, and fishing is so easy that many a tourist in the State I heard of no such catch as ours or anything so approximating it. Some parties who went over to the same ground on our "say so" had had indifferent luck.

Yicksburg, Miss.

BRETT H. POIR.

PANAMA—"THE PLACE OF MANY FISH."

IF I have not been misinformed, the old Indian word Panama means "The Place of Many Fish," and for once an appropriate name has been given. Had it embraced the word "educated," perhaps it would have been better, for all fish Panamanians were by far the best educated to make a man curse education in the abstract. Of course there are the usual exceptions.

Fancy, if you please, casting your well-baited hook in the midst of a dozen or so of magnificent corbennes, averaging ten pounds each, with half a dozen skip-jacks of good size loitering about on the outside, and witness the manner in which they receive your attentions. In the first place they will dart at the hook one after another, making a noisy jump, but as they appear just ready to strike a slight movement of the tail swerves them aside, when they lazily examine and investigate; then they quietly sail in a circle around the bait, until they feel the line touch their backs, and then it is good morning to corbennes. You may coax and play sweet on them, but they graduated some time before you came into the country.

And what a beautiful fish they are! as red as a goldfish, or dark brown, according whether they be the red or black variety, and several inches across—in fact, they frequently appear disproportionately broad. When served on the table the flesh is white, and as solid as a Columbia River salmon.

With skip-jacks you can enter the plea of "sour grapes," for they are scarcely worth the trouble of catching, as they are only good for chowder. Should you want fun you would get plenty, providing, of course, you hooked one, for they make a lively and are good to the last. But the best of all the skip-jack are game fish, and as ravenous as our Northern bluefish.

The natives are generally too tired to fish, although big prices are obtained in the market for all kinds. I witnessed a singular scene not long since. For some time I had noticed a boat cruising about in the harbor, which finally stopped, and while one man attended to holding it steady by means of the paddle, another was busy with a gyronet, holding the water in a bucket. Soon the mystery was explained. He was making a "sick," as the Eastern bluefishermen say; and after a little I saw enough commotion about his boat to satisfy me the fish had risen. Carefully he rose to an erect position and poised a harpoon, the while intently watching the water just off his port bow. Suddenly he let loose, and as suddenly went, reverse side up, into the bottom of the boat, which boat began a series of gyrations through the water, and finally, to the left, and finally in a circle, gradually nearing the vessel on which I stood.

The fisherman had meanwhile readjusted his equilibrium, and had eyes for nothing but the motor propelling his boat. The native who sat in the stern with the paddle had just all he cared to contract for to come in on the short turns, and the way that boat walked through the water was an interesting lesson to steam yachts. After traveling about the bay for about ten minutes the line was laid out, and the corbennes were hauled into the boat as I ever saw. He must have weighed nearly forty pounds. I did not suppose they grew to such a size, but was assured that even larger ones had been captured. The harpoon used was a two-pronged barbed instrument, the wooden handle fitting into an iron socket, and just at the socket the line was attached to the iron. When the blow was delivered the line was laid out, and the fish was hauled into the boat by the line. The fish was struck immediately behind the pectoral fins, which is the objective point, I believe.

We were lying about two miles off shore to-night, and just now, while writing this, I was disturbed by a noise, and for a moment thought one of the cattle had by some means got overboard, for it sounded exactly like an exhausted animal puffing and blowing; it proved to be a large school of porpoises or blowfish, and they were too dark to distinguish. It must have been a very large number, and reminded me of a herd of excited hogs, their blowing sounding very like it.

We are not destined to go without fish because two or three varieties known more than we do; for on yesterday we took out

less than seventy mullets while fishing off the steamer's deck. These fish run in schools, and will average two and a half pounds each in some schools, and in others they are smaller. Generally they are equal in size throughout the entire school. We fish for them with trout hooks, baited with dough mixed with enough cotton to toughen it. The fish sucks the bait, not striking it as in the manner of gamefish, but they make an interesting play after being hooked, for they are extremely rapid in their movements, and a man with a good, light rod could cock out a pleasant hour or two. As the fish remain very near the surface and their motions are at all times visible, a person gets very much interested in witnessing the way in which they hook themselves; and yet it soon grows tiresome, for the story gets old and excitement cannot be maintained for the average fisherman. I have seen corbion caught, but never except by throwing over a lot of waste meat, bread, etc., and casting in their midst.

One would suppose the fish would diminish in numbers owing to the immense number of sharks and pelicans. The latter, in flocks of from a dozen to a hundred, go out to sea each morning and return just before sundown to their roosts on the islands in the bay; or, when the fish are inside the reef, these birds can be seen gorging themselves for hours together. How they utilize the numbers eaten would puzzle a philosopher. I saw one bird devour twenty-seven mullet, by actual count, and it wasn't a very good day for pelicans either.

It seems like a singular statement, but the jumping and splashing of the fish about the vessel during the night quite frequently keep me awake, the water seeming to be fairly alive with them. They evidently come in on the flood tide, and perhaps seek the surface in such vast numbers owing to the absence of their natural enemies, the pelican and the man-of-war hawk.

Should you desire to take a trip into the swamp with me after monkeys, parrots, snipe, toucans, ducks, tigers and deer, I may accommodate you in another letter.

Panama, U. O. Columbia.

DE. J. O. SWAN.

Natural History.

THE QUESTION OF SHARKS SWALLOWING THEIR YOUNG.

IN a recent issue of FOREST AND STREAM an account of the finding of several young sharks in the stomach of a large female by Mr. E. G. Blackford, of Fulton market, was given. This article was extensively copied, and the general impression seemed to be that the young had been taken in for protection.

Knowing how little is known about sharks in general except stories of their voracity by sailors and details of their structure by zoologists, and that, although they bring forth their young alive, their character for glutony was such as to make it appear strange that they should care for any living thing which they could either swallow or bite in two, we were interested in this incident. Awaiting a favorable opportunity we interviewed Mr. Blackford, who told us that he bought the shark because it looked big and strange, and that he had no use for such a beast except the interest which heavily takes in all such creatures, that is, to learn their habits and find out how they live and what they eat. He ordered a man to open it and if anything unusual was found to bring it to him. The fish was the "mackerel shark," *Isotropsis elongis*, Gill, and contained ten young ones, each two feet long.

Our informant understood that they were in the stomach of the fish, but to make sure of this we now have the facts from Mr. Blackford, who says that the man only brought him the young and said they were from the stomach, but that he did not believe he could tell the difference between the stomach and the womb, and that, as the young sharks appeared fresher than the old one, he thinks that they had never been born. This certainly seems to be the most reasonable to any one who knows anything of the habits of sharks, or of the swift action of their digestive apparatus, and, as we before stated, there was no mark upon the little ones to show that digestion had begun, even to the removal of the mucus upon their skins. So far this case does not prove that sharks swallow their young for protection.

THE MOLLUSCA OF RIVERDALE, NEW YORK CITY

WITH NOTES.

THAT portion of the Twenty-fourth Ward of New York City in which the following shells were collected is bounded: North, by the south line of the city of Yonkers; South, by Spuyten Duyvel and Kingsbridge; West by the Hudson River, and East by Central avenue, covering in all an area of about four square miles, and is a rough and rocky district. There is one large pond (Van Courtland Lake) and several smaller ones; several brooks, of which Tibbet's is the largest. A few empty into the Hudson, but the greater number into Tibbet's Brook, that into Van Courtland Lake, that again by a continuation of Tibbet's Brook into Spuyten Duyvel Creek. The shores of the Hudson River adjoining this district are usually sandy beaches; beyond, mud and stony bottom, with occasional clod grass.

Amy arcuaria, Linn.—Very abundant in the Hudson between tide-marks; young are taken from early spring till last of June.

Modiola lateralis, Say.—A very common shell in the Hudson between tides. Our specimens are much smaller than those taken on Long Island or in the Harlem River.

Tellina fusca, Phil.—Very common in the Hudson between tide-marks, but small, the pink variety not so common.

Spharidium partumetum, Say.—In all still water ponds very common.

Spharidium silvaticum, Lam.—Found in Van Courtland Lake and Tibbet's Brook. Of specimens collected in August few were adults. Very common.

Psidium abditum, Hald.—Rather common in Odell's Pond. Often found attached to leaves of water plants and floating sticks.

Psidium equilaterale, Prime.—Found in small mud holes.

Very rare.

Psidium compressum, Prime.—Odell's Pond, common.

Unio complanatus, Sold.—Small in Tibbet's Brook, with bluish white nacre. In Van Courtland Lake large, with pink, salmon, blue and white nacre. Very abundant in both localities.

Mytilus plicatulus, Desh.—One-half valve only found on the Hudson, at Tibbet's Dock. No doubt carried from Spuyten Duyvel Creek, where it is common.

Ostrea borealis, Lam., and var. *costata*.—In Hudson very common, but small.

Mytilina arborea, Say.—Side hills in shady woods under sticks and bark; also on the borders of swamps, under sticks, etc. Very abundant.

Mytilina indentata, Say.—On side hills in woods only, under stones and leaves. Not so abundant as the last.

Pendolagidia nuxioides, Binn.—In rotten stumps, generally near streams. Not rare.

Combus fulva, Drap.—In rotten stumps, under leaves, etc., in shady places. Rather rare.

Helicodonta lineata, Say.—Generally in rotten wood near water, but have taken it in dry situations. Moderately abundant.

Linnaea agrestis, Linn.—Under bark of logs near water. Very common and of large size.

Linnaea campestris, Binney.—Very common in fields, on paths and on road sides; generally observed in early morning.

Linnaea flacca, Linn.—Taken in greenhouses. Rather common.

Linnaea maritima, Linn.—Found in mushroom beds. The mushroom spawn was received from France. At one time quite abundant.

Angustiparia alternata, Say.—Found at roots of willows in sandy soil near water and also in moist places in woods. Very common.

Patria striatella, Antik.—Under stones and sticks at edges of woods, underling fields. Rather rare.

Strophidia latipollicata, Say.—Found almost everywhere, but more common and larger on sticks near water's edge.

Stenotrena hirsuta, Say.—On side hills under stones in dry places. Very common.

Stenotrena monodon, Rackett.—On side hills in dry places, and in moist woods, have taken this species on trees several feet from the ground. Common.

Monodon var. fraterna.—Same station as the last. Not so common.

Tridontia tridentata, Say.—Very common in woods near water and dry hill sides, a beautiful pink lipped variety is sometimes found. I have taken specimens without any teeth, others without teeth on outer lip, and others with the parietal tooth only.

Mesodon thyroides, Say.—Very common in woods both in dry and moist situations. Have taken this on trees four feet from the ground.

Mesodon abalobris, Say.—Very common everywhere. The toothed variety is also common.

Polypoda pulchella, Mull.—Common near habitations, under chips and bark around wood piles; rare in the woods.

Cornella subcylindrica, Linn.—Common in one locality only, moist woods under rotten leaves.

Pupa ararifera, Say.—Very abundant at one locality only; at the base of willows on side hill near the Hudson River.

Pupa pentodon, Say.—Rare; found under logs with vertigo ovals in damp woods.

Pupa contracta, Say.—Very common near water, but rare in dry woods. Have taken three hundred at one time in one location.

Vertigo ovalis, Say.—Very common under leaves, sticks, etc., in damp woods.

Vertigo simplex, Gould.—Taken in company with *ovalis*. Rare.

Succinea acuta, Say.—On dry hill sides under stones. Common but small.

Succinea ovalis, Gould.—Taken on salt grass on borders of salt water pond near Hudson, also on borders of fresh water pond. Not so abundant as *acuta*.

Tribonophora Grevillei, Desv.—Very abundant under logs in woods, also under the bark of chestnut trees, and in holes in trees half filled with water.

Polypora dorsalis, Binn.—Not so abundant as the above, but not by any means rare. Taken under logs and in stumps.

Cargochium exiguum, Say.—Under bark and sticks near water. Very common.

Linnaophya erperator, Say.—Common.

Linnaophya desclusei, Say.—Common.

Linnaophya pulchella, Mull.—Common, but not so common as some two years ago, in small running streams.

Linnaophya humilis, Say.—Common in stagnant pools.

Radiola columbina, Say.—Common in several localities.

Var. *macrostoma*.—In mud-hole, dry in midsummer. Some five years ago this form was very abundant, but has now entirely disappeared, a much smaller form of *Columella* having taken its place.

Physa heliostrapha, Say.—Common in every pond and stream.

Physa Primiana (?), Tryon.—Some time ago took large numbers of a form which I refer to this species in one location only. They have since entirely disappeared.

Melasma beccarii, Say.—Very common in Tibbet's Brook.

Helisoma tricoloris, Say.—Van Courtland Lake. Rather rare.

Gyrinoides parvus.—Tibbet's Brook. Common.

Planorbis arigerius, Say.—Common in several ponds.

Ancylus fuscus, C. B. Adams.—Tibbet's Brook. Rare.

Ancylus parallelus, Hald.—In one pond. Very common.

Buccina undata, Stimp.—Very abundant on drift in salt water pond near the Hudson.

Schizaria lunata, Say.—Some few specimens were collected near Riverdale dock.

Nassa obsoleta, Say.—Very common on the mud of Hudson River.

Lofigo punctata, DeKay.—Many specimens were taken last May in shad nets off Riverdale dock.

Riverdale, N. Y., Oct. 16, 1880.

FOOD OF MARINE ANIMALS.

AT the recent meeting of the Association of German Naturalists and Physicians, held at Danzig in September last, a number of papers relating to all branches of science were read. One of the most interesting of all these was by Prof. Moebius, of Kiel, whose investigations into the nature of *Bozon* have recently attracted so much attention in the scientific world. An abstract of his paper "On the Food of Ma-

rine Animals," is given in *Nature*, and we here reproduce it:

In the sea, therefore, is generated by far the greater number of animal types, and these again in quantity and in bulk are throughout regulated by the existing supply of nourishment. This in its turn depends upon the organic matter of plants which in the sea also supply nourishment to its inhabitants. In our own seas, the North Sea and the Baltic, marine grasses are discoverable near the coast, while twenty to fifty metres lower are other kinds of plants; deeper still if we search we shall find few or none. Loose strips of plants that have been torn away from their roots have been brought up from a depth of some hundred metres; in the Baltic and North Sea these form a dark, soft, spongy mass. Nothing living is visible in this if placed in a tub; but if strained through a sieve tiny mussels, snails and crustacea become visible. In the depths of the sea-mud lining the bottom are countless worms, mussels and little animals which feed upon the spongy mass. Flounders and other fish penetrate into these mud-depths and devour the animals that are there. When the sea-bottom, however, is formed of soft clay, nothing beyond a few worms here and there will be found. Thus in the deeper portions of the Mediterranean, otherwise so rich in animal life, nothing at all is discoverable. The Professor, in the course of his remarks, went on to show that the supply of nourishment to the inhabitants of the sea was now and would be hereafter undiminished; and that the propagation of animal life in the sea would continue unchecked so long as the mighty ocean itself should last.

FASCINATION.—The phenomenon of snake fascination has never been satisfactorily explained though many explanations of it have been attempted. One of the most recent and most plausible of these has just appeared in *Nature* and is given below. The writer says:

In 1859 (21 years ago) I followed in the rocks of Avon, close by the park of Fontainebleau, their airy paths of Deneuch, where the approach of a storm induced me to leave the blue arrows, indicating the right path, for a short cut. I soon lost my way, and found myself in a maze of brambles and rocks, when I was startled by seeing on my left hand, at a distance of about ten yards, a snake, whose body, lifted up from the ground at a height of about a yard, was swinging to and fro. I remained motionless, hesitating whether to advance or to retreat, but soon perceived that the snake did not mind me, but kept on maintaining its swinging motion. I saw that the snake was attracted my attention to a greenfinch perched on a branch of a young pine overhanging the snake, with his feathers ruffled, following by a nod of his head on each side of the branch the motions of the snake. He tottered, spread his wings, alighted on a lower branch, and so on until the last branch was reached. I then flung my stick at the snake, but the point of a rock broke it and the snake disappeared with the rapidity of an arrow. On approaching the spot—a real abode of vipers—which I did with the greatest precaution, knowing by observation that it was the result of the bite of a viper, I saw the greenfinch on the ground agitated by convulsive and spasmodic motion, opening and shutting his eyes. I put him in my bosom to try the effect of heat, and hastened to reach the park of Fontainebleau. The little claws of the bird, opening and shutting, perhaps as an effect of heat, made me think that he might perhaps be able to stand on my finger, and he did clutch it, and held on with spasmodic squeezes. In the park I got some water, and made him drink it. In short, he revived, and finally flew off in the line-trench of the water. Now, while following the motions of the snake and bird, I experienced a singular sensation. I felt giddy; a queezing like an iron-hoop pressed in my temples, and the ground seemed to me to be heaving up and down. In fact the sensation was quite analogous to that experienced on a beginning of sea-sickness. From these facts, would it not seem probable that fascination is nothing more nor less than extreme fatigue of the optic nerve, produced by a rapid gyratory motion of a shining object, and resulting in a nervous attack and a coma? Curious facts at first at first attention to the death unconsciousness of any danger, and when giddiness warns him of his peril it is too late. The snake is as well aware of this as the *Lophus piscatorius* is of the effect of his membrane. In this system the fact of the bird coming down from a higher to a lower branch would be explained by the supposition that, giddiness overtaking him, he opened instinctively his wings and clung to the next support that he found, the motion having partially removed the giddiness so as to enable him to hold fast. Observe that nothing hindered the bird from doing away with the snake, being a bird of prey. I saw long, could never have reached even the lowest branch. Besides he could have no need to protect, for in the rocks of Avon there is no water save rain-water in the hollows of the rocks, and this is not potable on account of microscopic leeches which people it, the instinct of birds teaching them to avoid it.

ANCIENT HUNTING GROUND OF LOUISIANA.—The following extracts are from "An Account of the Red River (Louisiana) and Country Adjacent." To Gen. Henry Dearborn, Sec. of War. By John Sibley, Natchitoches, April 10, 1855. They were printed in the *American Register* for 1858, and are certainly worth reproducing for the benefit of our readers:

Near Natchitoches there are two large lakes, one within a mile, the other six miles to the nearest parts. One of them is fifty or sixty miles in circumference, the other upward of thirty. These lakes rise and fall with the river.

"It is almost incredible the quantity of fish and fowl these lakes supply. It is not uncommon in winter for a single man to kill the same to four hundred fowl in one evening. They load and fire as fast as they can, without taking any particular aim, continuing at the same stand till they think they have killed enough, and then pick up what they have killed. They consist of several kinds of duck, geese, brant and swan. In summer the quantities of fish are nearly in proportion. One Indian with a bow and arrow sometimes will kill them faster than another with two horses can bring them in. They weigh, some of them, thirty or forty pounds.

American Register, p. 55.

The accounts given by Mr. Brevet, Mr. Grappe and all other hunters with whom I have conversed of the immense droves of animals that at the beginning of winter descend from the mountains southwardly into the timbered country, is almost incredible. They say the buffalo and bear particularly are in droves of many thousands together, that blacken the whole surface of the earth, and continue passing without intermission for weeks together, so that the whole surface of

the country is for many miles in breadth trodden like a large road. — *From the same*, p. 65.

THE PAPPABOTTE.—*Rutland, Vt., Oct. 15.*—*Editor Forest and Stream:* Now won't you please to inform an anxious public what the dence a Pappabotte is? We have heard a great deal of this thing in your columns, but whether it is fish, flesh or fowl, or hard-shell we don't know. Please explain.

VERDE MONTE.

We will, we will. The strain shall be forthwith taken off the mind of "Verde Monte" and others, and their anxiety and that of the public shall be in a measure relieved. Know then, Oh anxious public, that a Pappabotte is neither fish, flesh nor hard-shell, but fowl. In fact, not to put too fine a point on it, a bird. Pappabotte is the Creole French name given in Louisiana and some of the Gulf States to the gray plover, or Bartram's sandpiper (*Actitis bartramiana*). The name is referred to by Audubon in his biography of this species. Other names applied to it are upland plover and field plover.

Fish Culture.

THE ALABAMA FISH COMMISSION.—In our list of Fish Commissioners published last week we left out this State because we failed to hear from them, and as in no case did we use any information at second hand we were obliged to leave Alabama out. We are sorry now that we did not wait one week more, as we have just heard from them; but beginning on the 1st of September we thought that all not heard from by the middle of October must certainly have disbanded or ceased to exist. Few know how much labor it involves to get up the annual list, for although many respond promptly, others are absent, and it takes several letters to find them and get a response. There are changes every year, and as the **FOREST AND STREAM** is the organ of communication between all fish culturists in the civilized world, it is a matter of public necessity as well as convenience to have such a list. To complete it we now print:

ALABAMA.

Charles S. G. Doster.....Prattsville
D. B. Hundley.....Courtland

THE FISHWAY QUESTION IN IOWA.

A MILLER PROTESTS.

OXFORD MILLS, September 20, 1880.

Editor Eveleva.—You will oblige me much if you will give me space to express my views in relation to a law passed by the Eighteenth General Assembly of the State of Iowa.

Chapter 128, Section 3, of said law reads: "If, within sixty days after the service of a notice by the sheriff of the county, the owner, agent, or party in charge shall fail to construct and attach a fishway to said dam, as required by the Commissioner, then the county Board of Supervisors shall immediately proceed to construct and attach the same; and when so constructed, the original cost and twenty per cent. thereon, as a penalty, shall be entered upon the tax book of the county, and shall be a lien on said property, to be collected in the same manner as provided by law for the collection of other taxes."

Section 4, *repeals*. "To carry out any of the provisions of this act, the county Board of Supervisors may issue county warrants for the payment of such expenses, and when the taxes are paid, the warrants and all accrued interest thereon shall be refunded to the county, and the balance, after paying the Clerk and State Commissioner and Board of Supervisors for their services etc., and proceeds to be paid over to the county treasurer, and will become a part of the school fund."

To this the Fish Commissioner adds, on his own responsibility, with all the dignity that belongs to his office, in his notice to mill owners: "No temporizing or temporary work will do, as it will be at the mill owner's expense, as the law requires him to keep it in constant repair."

Mr. Editor, I am a citizen of these United States and desirous of showing willing obedience to the laws thereof. I derived my title to my land from the United States government, clear of any and all encumbrance, without any reservation of erecting or upholding fishways for the benefit of other parties. Therefore I claim protection from the United States from imposition and unjust laws. Neither the State of Iowa nor any other State has any right to pass any law that will annoy, hamper, endanger or depreciate the value of any man's property, without paying him in full for all damages he may sustain. If the people of the State of Iowa want to preserve the fish, what claims have they on the mill owners to compel them to be at all the expense? Does it benefit the miller more than the farmer, or any one else? Do they consider the mill owner an intruder? Do they prefer cat-fish and wall-eyed pike to the manufacturing interests of the State? If so, why don't they pass a law that will give them the power to destroy all the mill-dams in the State, and give the fish a chance? They have just as much right to pass a law of this kind as they have to pass the other.

What benefit does the miller derive from this heavy expenditure of money? You rarely find the miller with a fish-pole in his hand. It is not this class of men who reap the benefits from the fish law. For my own part I would give considerable money if there were not a fish in our rivers. They are the cause of bringing a parcel of lazy loafers to our fishing grounds, from the country and the towns, who destroy the surrounding property, tearing down and burning fences and desecrating the Sabbath day, to the annoyance of quiet, peaceable and law-abiding citizens. Of course there are few exceptions to this rule. It is for a class of men and boys like these that the millers are required to be at from \$300 to \$500 expense in erecting a fishway to preserve the fish and contribute to their pleasure; not alone this amount of expenditure, but they are required to keep this annoyance and encumbrance in perpetual repair, no matter whether it is carried out by any flow of ice and logs that passes over the dam—which will be the case nine times out of ten—or whether it carries out the dam as well.

Heretofore the millers of the State of Iowa have been well protected in their rights by the enactment of good sound laws on water privileges; and for this reason Iowa stands

second to no grain manufacturing State in our Union—as the reports from the late Miller's Convention at Cincinnati will show. Is it possible that all the protection we have heretofore enjoyed is to be destroyed by some wild fish fanatic who cares more for a wall-eyed pike or a sun-fish than he does for all the manufacturing interests of the State? Let the millers of the State rise in their might and defend themselves against such unjust and arbitrary laws, as they have done heretofore in such cases of imposition, and they will undoubtedly come out victorious.

If this fish law can be enforced, then the next law I expect to see enacted will be one requiring every farmer who owns 160 acres of land on the line of any railroad throughout the State of Iowa to build, grade and lay a track the entire length of his farm at his own expense. Not only this, but the law will require him to keep it in constant repair, at the risk of losing the balance of his farm if he does not comply with all the requirements of the law, whether from unwillingness or inability. All these benefits he is expected to donate to the travel of the general public. Why not enact and enforce a law of this kind? One can be as easily enforced as another. I can see no difference.

If the people of the State of Iowa want to stock their rivers with fish, why not levy a general state tax for the purpose of erecting these fishways and keeping them in repair, at the same time giving the mill owner a guarantee that any damages he may sustain from the erection of such fishway will be promptly paid by the State, or the county in which the mill dam is located. The State has no more claim on the mill owner in this respect than it has on the farmer, mechanic or any other class of men. I think it is the duty of the press throughout the State to come out boldly and denounce all such unjust laws.

JUSTICE.

REPLY BY COMMISSIONER SHAW.

After giving the law, the correspondent, who evidently, from what is written, is a mill owner, gives what appears to be his earnest, honest sentiments, and states quite fully what he thinks to be the grievances to which dam owners are subjected by the fishway law. Being a good argument from his point of view, it deserves a careful and candid consideration at the hands of the public.

He says first: "I am a citizen of the United States and desirous of showing willing obedience to the laws thereof. I derived my title from the United States government, clear of any and all encumbrance, without any reservation of erecting or upholding fishways for the benefit of other parties," and claim protection from any law that will hamper, endanger or depreciate the value of any property, without payment in full for all damages sustained.

The writer overlooks the fact that he is but one of several hundreds that have obtained titles exactly alike from the general government to the banks of the Wapsipinicon River, and that by making the river impassable for fish he has been depreciating the value of their property, thereby doing injury individually to all these parties just what he now complains the State should not do him.

We hold these principles to be well settled by usages and decisions—so many that we find it impossible in a short article to quote but a very few of them:

1. In any grant from the public to individuals, any privilege which is not expressly granted is withheld.

2. A river is a public way.

3. The right to the water and fish in a stream is a joint one to all the owners, and must be so used by each as not to unreasonably interfere with the rights of others.

4. The passage of fish in a river is a public right.

5. The Legislature has the right to make such laws as will protect the public from injury by an improper use of any of these public rights.

To partially prove the correctness of these positions we will submit a few decisions.

"Every owner of a dam holds it on condition or limitation that a sufficient and reasonable passage of fish shall be allowed for fish, this limitation being for the benefit of the public, is not extinguished by any inattention or neglect in compelling the owner to comply with it." (Stoughton v. Baker, 4 Mass., 528.)

In that case there was neglect to build a fishway from 1634 to 1789; but it was held that the duty continued.

"The preservation of fisheries is for the benefit of the public. The right to have the fish pass up a river is a public right. The right to catch the fish is a private right of the fisherman. The right to have the fish there, so that they can be caught, is a public right." (Commonwealth v. Essex Co., 13 Gray, 247.)

"The grant of privileges and exemptions to a corporation is strictly construed against the corporation, and in favor of the public. Nothing passes but what is granted in clear and explicit terms." (Ohio Life Ins. Co. v. Debolt, 16 Howard, 455.)

"Ownership of the banks and bed of a stream gives to the proprietor the exclusive right of fishery opposite his land, as well as the right to use the water to create power to operate mills; but neither the one nor the other, nor both combined, confer any right to erect any obstructions in a stream to prevent the free passage of fish up and down the river at their accustomed seasons, as such obstructions would impair and ultimately destroy all such rights owned by other proprietors both above and below the obstruction on such stream.

"Such water is everywhere regarded a public right, and fisheries, even in waters not navigable, are so far public rights that the Legislature may ordain and establish regulations to prevent obstructions to the passage of fish, and to promote the usual and uninterrupted enjoyment of the right by riparian owners." (Commissioners v. Holyoke Water Power Co., Supreme Court of United States, December Term, 1872.)

This Holyoke case is the most noted that has ever been determined in this country, and was especially favorable to the dam owners; as a moment's glance at what was claimed by the defendants will show.

It was claimed for them, as has been claimed by our correspondent, that they had a good title from the Government, and so were entitled to use their property as they saw fit.

It was claimed that they had used the water power, as they were using it, for a long period of time and so had obtained the right to use the State lands and water power in improving their power, and so it was against public policy to compel them to put in a fishway. Also, that they had paid owners of fishing or riparian rights above their dam \$30,000 for those rights, and that that fact should relieve them.

But more especially it was claimed that they had a special charter from the State Legislature permitting them to build just such a dam as they had built.

We have no time or space to go over this case, but will say that all that was claimed for the defense was proved or admitted; that it was argued by eminent counsel, both be-

fore the Supreme Court of Massachusetts and the Supreme Court of the United States; that on August 31, 1872, the Supreme Court of Massachusetts entered a decree against the defendants, compelling them to put in a fishway; that upon appeal to the Supreme Court of the United States, the decree was affirmed at the December term, 1872, and that the owners were compelled to put in a fishway. We could cite dozens of decisions bearing upon the question, and in all our reading know of no one decision that has not borne in the same direction. So we consider the question virtually settled, so far as the courts are concerned.

The Judiciary Committee of the House and Senate of the Seventeenth General Assembly of Iowa, composed of the best of legal talent, so determined and reported, after a full investigation, when this law was before them for their action.

Outside of this question of law there is one of right or "justice." Originally all the purchasers of property along a stream pay the same price for their lands. Fish were abundant along the streams, and are the property of the joint owners. One man builds a dam that effectually stops the passage of fish; but as they are plenty, no one objects. The mill power brings wealth to the owner, until he boasts of its value. The dam brings barrenness of fish to the stream, until the mill owner, scorning the little that is left, says: "I would give considerable money if there were not a fish in our river."

Now those who have suffered these losses ask those who have assumed to own all there was of value along the river, and in so doing nearly destroyed their neighbors' rights, to so use the privilege they are enjoying as to permit the fish to pass up the streams through the waste water that flows over their dams, in order not to entirely annihilate the fish—knowing full well that what they ask will only partially restore to them their rights, but being willing to suffer this much rather than to injure in the least the water powers that furnish the motive power for an industry which is fully and justly appreciated.

The fair discussion of this question would occupy more space than we have at our command, but we think that what we have said covers the case fully, where the builders own the land wholly upon which their dams are built. But it might be added, in another stream, like the Wapsipinicon, a portion of the lands upon which the dams are built—that is, the bed of the stream—has never been bought or sold, and belongs as justly to the poorest person in these United States as to the parties who assume to own the dams that are upon them; and there is no question, as a matter of fact, but that an action for their entire removal could be sustained in the proper courts, if sufficient cause were shown for so doing.

What we have written is in the kindest of feeling toward mill owners, but is what we believe to be the facts and the law in the case, and what is being demanded by the masses of our people at the hands of owners of dams.

The Fish Commissioner claims to have made plans of fishways, as far as he was able, so that they shall not interfere with the water powers (as they only use the waste water), and that, in his opinion, they will add strength to the dam, while they are as cheap as durability and efficiency will permit.

B. F. SHAW.

FISH CULTURE IN FRANCE.

FROM the annual report of M. Ravet Watel, Secretary to the Societe d'Acclimation of Paris, for the past year, we publish the following translation of that portion of it which relates to fish culture. He says:

As in preceding years, the subject of reappearing the streams has continued to occupy you seriously, and in seeking to find a way of putting an end to the abuses of fishing and poaching, which have caused the disappearance, more or less complete, of fish in almost every river, you endeavor to enrich our ichthyological collection with rustic species of rapid growth, and consequently more fit than indigenous species to facilitate a speedy reproduction of fish. Among these exotic species the salmon of California merits to attract your attention in a particular manner, because of its remarkable vigor, its unusually speedy development, and its fitness to acquire a high temperature. Thanks to Prof. Spencer F. Baird, Commissioner-General of Fisheries in the United States, our society has obtained a considerable quantity of fruitful eggs of the *Salmo gairdneri*. These eggs were entrusted to several of our colleagues, and judging from the reports which we have received, the species does not seem to lose in any degree the excellent qualities which distinguish it in America. Already a considerable number of fry have been captured into a great many rivers, and permit us to expect the introduction of this excellent species into our French waters. We cannot express too many thanks to Prof. Baird, who, by his excessive generosity to our society, has permitted us to obtain so precious an acquisition.

We owe, besides, great gratitude to Mr. Fred Mather, of Newark, N. J., assistant to the Commission of North American Fisheries, who has been kind enough to see to the shipping of the eggs destined for the society, and to contribute by assuring the success of the invoice by his intelligent and valuable assistance.

The improvements made in foreign countries, and especially on the other side of the Atlantic, in the artificial reproduction of fish, have excited our attention, and you have hailed with great interest the information given you as regards the labors of the superior Commission on Fisheries in the United States. An assembly of distinguished and learned men and of professional fish culturists, such as it has the eminent Prof. Spencer F. Baird, this commission renders the greatest services to pure zoology, as well as to fishing industries and the culture of fish. Triumphant over every difficulty, it has succeeded in applying to the sea-fish the same process of artificial multiplication, whose usefulness a few years ago was contested with regard to the species living in fresh water. It is right to add that it is on a gigantic scale, and that this process will be put in operation at the end of the present year. The Universal Exposition of 1878 furnished the occasion of your such and should not escape your attention. You had a report on the culture of fish at the great international conference presented to you, and Mr. Chabrier has given you an account of the interesting observations which he had occasion to make at the Aquarium of the Trocadero during the time that the direction of this magnificent establishment was confided to him.

Mr. Dussac has sent you a detailed account of the transformation of salty swamps into reservoirs for fish, and of the importance which the creation of such reservoirs would have as regards public utility.

Finally, you have recorded with care the communications forwarded by Mr. Ditten on the reproduction and protection

of lobsters and oysters in Norway, and those regarding the researches of Dr. Henry Le Roux on the hybridization of the oyster.

Sea and River Fishing.

THAT SIX AND A QUARTER POUND BASS.

WE recently referred to a photograph of a small-mouth black bass, *Micropterus salmoides*, sent us by Dr. Sterling, which had the effect of removing our doubts about their reaching this weight, or rather a pound and a quarter below the avaridupois named was the limit at which we stuck. The letter which accompanied the picture was mislaid, but recognizing the necessity of placing this upon record in order to remove the skepticism of others as to the size attained by this fish in Lake Erie, we now publish it:

CLEVELAND, O., Sept. 14.

EDITOR FOREST AND STREAM:

I enclose to you the photograph of a small-mouth black bass which weighed exactly six and a quarter pounds, without the addition of a lead sinker in its stomach. I made a cast of the fish at the time it was taken, but being hastily done the silhouette was not perfectly removed, consequently the scales are not well defined, though the proportions and parts of the fish are correct. I have caught this fish in the St. Lawrence, Niagara River, and Sault Ste Marie as well as throughout Lake Erie, and at several places in lakes Huron and Superior, but only in one locality have I found them to exceed four pounds, and that is among the islands at the head of Lake Erie.

The large mouth bass is never taken in Lake Erie. This fish frequents the marshy, grass-grown rivers and estuaries; he is green, leery and slinky, smells of his surroundings, and when cooked has about the same taste: is soft in flesh; while on the contrary the small mouth is the most active fish on the hook of his size. He frequents clear, cool water, and, if in a stream that is rapid and aerated, his flesh is particularly hard, and I have a positive belief that, like the turbot, he improves by two or three days' keeping, which we can say of no other fish.

E. STERLING, M. D.

DO FISH HAVE FITS?

WHILE walking by the Hudson at Inwood the other day I saw a succession of bright flashes on the surface of the water coming from some object advancing down the river. It proved to be a blackfish, and it was going through the most singular gyrations, unlike any that I have ever seen in sick, injured or dying fish. It lay flat upon its side; its fins were without motion, its eyes were bright, not clouded; its mouth was rigidly open and partly out of the water, and its tail struck downward and a little inward, so that the fish performed a complete revolution in the course of four or five flaps of its tail. The flap of the tail was not intermittent or irregular, but was a strong, healthy beat, and the gyrating motion of the fish was suggestive of waltzing. Thinking that it had escaped from the hook, or had been thrown back after being taken out of the water, I examined it closely when it came within a few feet of the bank, and saw that it was a sound, well-fed fish, without mark of hook or injury of any kind. It did not struggle like a dying fish, nor float for moments without motion, nor endeavor to swim to the bottom, and in the five minutes or more that I kept it in sight it did not intermit in the strength or regularity of the beat of its tail. I threw some pebbles into the water near it, but not until I had thrown several handfuls did it exhibit signs of returning consciousness. When I used large stones to create a greater shock in the water the fish made efforts to right itself, and, after much vigorous floundering, succeeded. At last I tossed a heavy rock within a couple of feet of it, and with a frightened rush it dived toward the bottom and did not appear again. I never knew that fish had a nervous organization of sufficiently high order to enable them to have fits, but this particular fish acted like the victim of a nervous disorder. Can anybody give an explanation of its conduct?

C. M. S.

The symptoms are those of a fish which has been poisoned by persons who use forbidden articles for procuring minnows for bait, but it is, of course, impossible to say.

BIG STRIPED BASS.—New York, Oct. 21.—Having seen an inquiry in your issue of last week, asking if there was any record of the largest striped bass ever taken with rod and reel, I would say that there is on record at Pasque Island Chli one taken some ten years ago by A. B. Dunlap weighing 62 lbs. The writer took one two years ago of 60½ lbs. weight, also record at above club. I saw one in New Bedford, taken at Nantux's land, weighing 64 lbs., and have heard of one of 67 lbs., and from reliable information. There is recorded at Pasque Island many between 50 and 60 lbs., and between 40 and 60 lbs. is no rarity with us at Pasque. All of above were taken with rod and reel. Yours truly, FRANK O. HERRING.

We are glad to receive such notes as the above, and place these things permanently upon record. When future historians of angling wish to write up any fish, they will naturally turn to the files of FOREST AND STREAM for such information, and will miss all items in local papers and occasional magazine articles. Most sportsmen recognize the fact that FOREST AND STREAM is the record for all connected with the ROD AND GUN, and that no matter where a thing may be printed it is not on record until embodied in the pages of FOREST AND STREAM, no more than the pedigree of a Jersey Bull is on record if published in a village newspaper and omitted from the Herd Book.

We therefore desire to impress upon our readers that for all purposes of record of sizes of game animals and fowl with rod and gun, FOREST AND STREAM is not only the record but the only one.

ALASKA SALMON.—A correspondent of the San Francisco Bulletin, writing from Alaska, says: "As for the salmon, as seen this morning urging their way up the swift, braving

currents—tens of thousands of them, side by side, with their backs out of water in shallow places—nothing that I could write may possibly give anything like a fair conception of the extravagance of their numbers. There is more salmon apparently, bulk for bulk, than water. In fording the stream the writhing multitudes, crowding against one another, could not get out of one's ways. One of our men waded out in the midst of them and amused himself by seizing them above the tail and swinging them over his head. Thousands of them could thus be taken by hand while they are making their way over the shallows among the stones. Whatever may be said of other resources of the territory, it is hardly possible to exaggerate the importance of her fisheries. Not to mention cod, herring, halibut, etc., there are probably not less than a thousand salmon streams in Southeastern Alaska as large or larger than this one (about forty feet wide) crowded with fine salmon every year. The run commenced this year more than a month ago, and the King Salmon, one of the five species recognized by the Indians, was running in the Chilkat River about the middle of last November."

SILVER BASS.—Illinois State Laboratory of Natural History.—Normal, Ill., Oct. 18.—In response to your request for information about the use of the name "Silver Bass," I respectfully report that the name is applied in Northern Illinois very generally to *Pomoxis nigromaculatus*, Z. S., known in the Illinois and Mississippi regions as the black croppie. I don't know about the change of color, but the purple spot on the operculum and the long lower jaw are right, while the body is short and deep. If this should prove to be your correspondent's species, and if a knowledge of their natural food is of any importance to him, it may be worth while to note that I have found the young dependent upon *Entomostroma* much longer than most other fishes, feeding upon little else until three or four inches long. The food of the adult varies in the Illinois River with the time of the year. In early spring they take *Entomostroma* in immense numbers; in summer they depend chiefly on the aquatic larvae of May-flies, dragonflies and the like, and in autumn, as the weather turns cold, about a third of their food, on an average, consists of small fishes. The larvae of May-flies and dragon-flies are, on the whole, much the most important of their food resources. For usefulness the species ranks here about with the white bass (*Morone chrysops*).

S. A. FORBES.

Montreal, Canada.—In your issue of the 14th inst. a paragraph occurred headed "Silver Bass." There is a fish taken in Lake Ontario locally known by the latter name. It belongs to the genus *Labrax*, but I cannot determine the species. The small-mouthed fishes which Mr. Begg gave the Society in France, and which came from Lake Ontario, evidently do not belong to the bass family. The pickerel is large in *Labrax*. I am anxious to see a published list of this genus, as species occurring in northern waters are not identified.

WM. COOPER.

GRUBS IN BASS.—London, Can., Oct. 19.—While reading a letter in your paper, from some gentlemen fishing in Michigan, I noticed they had caught some bass, sinfully attracted to many I have caught, namely, with grubs in the flesh. The grubs seem to be firmly imbedded in the flesh, but do not appear to injure the fish in the least. I have caught many like this in the Lakes of Muskoka and also in some of our rivers. Though not very nice-looking before being cooked, after that I never could distinguish anything wrong with them. I would like to hear very much what is the cause of it, and if they affect the fish.

A. G. C.

GRUBS IN FISH.—Cincinnati, O., Oct. 20.—In regard to the communication of "W. D. T.," in FOREST AND STREAM of Oct. 14, relating to the presence of grubs in black bass, I would say that nearly, if not all species of fish are subject to parasitic worms or grubs during warm weather, and sometimes after other seasons of the year. These parasites are destroyed in the cooking of the fish, and are not at all injurious to the human economy. There is no doubt but we take into our stomachs, with food of various kinds, thousands of parasitic creatures, some living, others destroyed in the process of cooking. If we should submit our aliment to microscopic examination, and refuse all that contained living organisms, we should all become "Turners," for, as Swift says:

"So, naturalists observe, a flea
Has smaller fleas that on him prey;
And these have smaller still to bite 'em;
And so proceed ad infinitum."

J. A. HENSHALL.

HOW TO DRESS BLACK BASS AND PICKEREL.—St. Joseph, Mich., Oct. 17.—About everything has been written on black bass but how to dress them. I will tell you how I do it. Take a thin, old case-knife made sharp (a file is the best to sharpen anything but a razor); begin at the tail and run to and from you a quick, sharp stroke just under the scales and not too near to the meat. That leaves a thin white membrane or skin on the meat and takes off all scales and black skin. The skill will soon be acquired. It takes off all the black, and when cooked takes away all nasty taste. I do not pickered the same way. Now let our piscatorial brethren, if I and I pledge my word they will not scrape scales any more if they have been in the habit of doing it. Brethren, try it.

LUTRON.

AN ELEVEN-POUND TROUT.—Bethel, Maine, Oct. 1.—The close season for trout is now upon us, and hundreds of sportsmen are now returning to their homes from the Oxford County lakes. The catch of large brook trout has been very fair, and in most cases satisfactory; although some parties have been disappointed, yet others have carried home many beautiful specimens of the largest *Salmo fontinalis* in the world. The largest specimen known to be caught and weighed was carried home by a Mr. Marble, of Boston; weight, eleven pounds. Many more of the weight of ten, nine, eight and less pounds were taken at upper dam, foot of Moolamagantic. Trout of the largest size could, and can now, be seen readily by any one on and near their spawning grounds, but they chiefly rise to a fly. The most of these taken are baited with spawn, although many parties will not deviate from the more sportsman-like way of fly fishing. The trout are generally of larger and smaller kinds abound in these regions, and the mountains are gorgeous in fall foliage, forming a fitting tableau to the closing up of the enjoyments of a successful season.

J. G. RYAN.

SALMO WILMOTI.—Montreal, Canada, Oct.—What about the name of the author of *Salmo wilmoti*? It is the duty of

your correspondent "B." who boldly answered my prior statement, to elucidate this matter. I am anxious to know more about this fish and its habits, especially as there is a statement made that being confined to Lake Ontario it visits salt springs within the lake. I cannot find a person to corroborate this assertion, and I look on it as absurd.

Forty-five specimens of twenty-six species of ruffed fishes were hung up by me at our late exhibition. My fishes are placed on boards to hang from the wall like pictures. In this way they are preferable for museum purposes. The collection of fishes exhibited by me last year at Ottawa, Ont., were purchased by Dr. Storey Hunt, the celebrated chemist, for McGill University Museum. Canadians give but little encouragement to natural science, hence this branch of the art suffers.

WM. COOPER.

ILLEGAL FISHERMAN STOPPED.—It is a pleasure to record that one of the newly appointed Game Protectors of New York has entered upon his duties in a fearless manner, and in a recent raid on the gill nets in Cayuga Lake destroyed forty of them. The Rochester *Express*, from which I got the news, says:—"State game constable, George M. Schwartz, returned to-day from a successful expedition on Cayuga Lake, for which place he left here on Wednesday. It had been surmised that a good deal of illegal fishing was being done in Cayuga Lake. The constable chartered a steamer at Penn Yan last evening and made a tour up the lake to Hammondsport with grappling irons dragging in the water. The result was that over forty gill nets were drawn to the surface. These were destroyed. A good haul."

SIZE OF BLACK BASS.—St. Joseph, Mich., Oct. 17.—I see in number Oct. 14 your express dots of black bass exceeding four pounds' weight. If you will come here we will take you out where you can take and see taken several in a day, genuine *Micropterus salmoides* (*Microstoma*) that will weigh from four and a half to five pounds. There has been near a dozen taken here the past week that went four to five and a half pounds. We never catch any *Microstoma* that go over four pounds probably. I frequently hear of the *Microstoma* being caught weighing seven and eight pounds. I never saw one over six to seven pounds.

LUTRON.

THE LARGEST HALIBUT.—The Cape Ann Advertiser, in giving the record of the largest halibut, says:

Last week we published a statement that a halibut weighing 377 pounds, landed by sch. Wachusett, was the largest ever landed. This is true so far as Bank halibut are concerned, but Capt. William H. Oakes comes to the front and states that in 1872 he purchased a halibut brought in from Georges, which weighed 447 pounds. He telegraphed to Boston and sold him, and the monster attracted much attention in the market. A halibut was landed at the New England Fish Company's wharf a few years since which weighed 368 pounds.

Game Bag and Gun.

Address all communications to "Forest and Stream Publishing Company, New York."

GAME IN SEASON IN OCTOBER.

Moose, <i>Alces americana</i> .	Woodcock, <i>Philohela minor</i> .
Caribou, <i>Rangifer caribou</i> .	Black-bellied plover, <i>oxy-ops</i> .
Antelope, <i>Ovis montanus</i> .	<i>Macrorhamphus gryllus</i> .
Red or Virginia deer, <i>C. virginianus</i> .	Long-billed curlew, <i>Namias longirostris</i> .
Squirrels—red, black and gray.	Towhees, or calico back, <i>Streptopelia interpres</i> .
Flares—brown and gray.	Red-breasted snipe, dowitcher, <i>Micropterus gryllus</i> .
Reed or rice bird, <i>Dolichonyx oryzivorus</i> .	Red-backed sandpiper, or ox-bird, <i>Tringa americana</i> .
Wild Turkey, <i>Meleagris gallopavo</i> .	Great horned godwit, or marlin, <i>Limosa melanotos</i> .
Pinated grouse or prairie chicken, <i>Capendula capenda</i> .	Whillet, <i>Totanus semipalmatus</i> .
Huffed grouse of Pennsylvania, <i>Bonasa umbellus</i> .	Tattler, <i>Totanus melanoleucus</i> .
Quail or partridge, <i>Ortyx virginianus</i> .	Yellow-throats, <i>Totanus flavigula</i> .
Sora, rail, <i>Porzana carolina</i> .	

"This enumeration is general, and is in conflict with many of the State laws."

"Bay birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, surf-bird, phalaropes, avocets etc., coming under the group *Lymniscus*, or shore birds. Many States permit prairie fowl (pinated grouse) shooting after Aug. 15.

THE VELOCITY OF SHOT.

EXPERIMENTS GIVING DIRECT MEASURES OF THE TIME OF FLIGHT OF FOWLING PIECE SHOT OF VARIOUS SIZES OVER VARIOUS DISTANCES, WITH REMARKS ON THE APPLICATION OF THESE MEASURES TO THE ART OF SHOOTING ON THE WING.

By ALFRED M. MAYER, Professor of Physics in the Stevens Institute of Technology, Hoboken, New Jersey.

[Read before the American Association for the Advancement of Science, at Boston, on August 31, 1890.]

ABOUT a year ago I determined to make a series of experiments with an unobtainably accurate chronoscope, which would give direct measures of the velocity of fowling piece shot of various sizes. At that time I was not aware that any determinations of this kind had ever been made, though similar ones to the velocities of the balls of ordnance and rifles were numerous. Thus I began my work entirely free from preconceived ideas as to what the experiments would reveal. It was only toward the end of my work, when on a visit to my friend Professor Rice, of the United States Naval Academy, that the Professor told me that he had made a short series of similar experiments with a Le Bonafant chronoscope, and had published them in the *Rap. and Grevs* in July, 1875. This paper I then read, and I here repeat it as an appendix to my paper. My attention has subsequently been called to the works of other experimenters in the same direction; of them I have taken references, but have purposely avoided reading them.

I have made this preamble to my paper to show that my experiments are to be taken as entirely independent of other similar work, for I was not guided nor influenced during my experimenting by a knowledge of what cause me to reject certain experiments as erroneous because they did not give results which I had thought they should have given; for no matter how conscientious an experimenter may be, he is sometimes influenced by preconceived notions, and unwittingly desires his experiments to bring out certain results. I

have always in my work endeavored to avoid this mental prejudice, and have therefore, whenever possible, worked in this manner: viz., I write down the numbers given by the experiments as they are successively made, and do not reduce or compare them till after the whole series has been finished. The reader will therefore find in my results apparent anomalies, even contradictions, or, if you please, absurdities. These anomalies are those numbers which always catch the eye of him who does not know, from experience, the difficulties and exhausting toil of a protracted series of delicate experiments, and on these anomalies he will dwell to the exclusion of what, in the main, the experiments conclusively show. To such I say, with the experience of twenty-five years of experimenting: Make the experiments for yourself and do better, and for your better work science will be indebted and will surely credit you with your superior skill and patience. Each experimental investigation is a step in progress to something better; but without the first step is made the firmer tread will not be gained. *C'est le premier pas qui coute.*

Nature, however, does not work in an anomalous, contradictory or absurd manner. These anomalies are of our own production, and are due either to the errors of the apparatus we use, or to certain peculiar actions in the phenomena which accompany those we are particularly studying. The apparatus detects and measures both of these classes of actions, and it is the office of the investigator, after his experiments have been finished, to guard against the one or the other. Thus, for example, in the flight of shot we have many moving pellets, and they do not all move with the same velocity. No apparatus known can give the velocity of each pellet in a charge so that we may therefore deduce the average velocity of the charge. So it happens that with charges of large shot, when you have fewer pellets, and especially when these charges are shot over great distances, some pellets of high speed may strike the target and record their velocity, while in the next experiment, pellets of lower velocity may reach the target, and this will not avoidably happen, no matter how accurately we hold the gun on to the target. But these very differences shown in the time of flight of the various pellets point out an interesting and important fact; showing that such work as we have begun requires a long time for its completion, for the measures of the velocities of many charges of the same weight of powder and shot must be made to get the average velocity of all the pellets. It may be here asked why I did not do this. To this question I reply that I cannot afford to give a year of time to make the first step in this subject of investigation. A rich field I have pointed out for other experimenters to enter; and I trust that since our large American arms manufacturers are now making fowling-pieces they will devote a mile of their profits to just such investigations as this one, on which I have spent much of my thought, time and private means.

The errors of the records of the apparatus itself can easily be investigated, and they have been accurately determined. They are exceedingly minute and cannot affect appreciably the results of our experiments.

The deductions which I make from these experiments are those which these experiments show, and not what may be shown in the experiments of others. I give these experiments of mine as entirely independent evidence on the subject of the velocity of shot, and of course my readers may give them just as little or as great weight as their individual judgments may determine. That they have been conscientiously and carefully made no one will doubt who has had any experience in the use of chronoscopes used in measuring the velocity of projectiles.

I do not think that the sportsman and experimental physicist are often found in one person, even in this country—still less in Europe. From my youth I have been devoted to everything relating to the gun, and this experience has, I presume, given me an advantage in this investigation over other physicists. I had, however, the good fortune to have had a better sportsman and experimenter for my assistant—Professor B. F. Thomas, now of the University of Missouri—who entered enthusiastically into this work, aiding me with his ingenuity as an experimenter and with his suggestions derived from his extensive experience as a sportsman.

Description of the Chronoscope and a Determination of the Magnitude of the Error in its Results.

The chronoscope used in these experiments is very simple. It consists of a metal cylinder turning on an axle on which is cut a screw. This screw moves in a stationary nut, and this arrangement gives the cylinder a lateral motion when it is revolved on its axle. The cylinder is covered with fine printing paper, which is then smoked with burning camphor. A tuning-fork is screwed to one end of a thick piece of wood. The other end of this piece of wood is hinged on to a base. To the end of one of the prongs of the fork is cemented with shellac a small triangular piece of foil. The fork is vibrated by a bow, and then the hinged board is brought down against a stop so adjusted that the point of the foil on the fork just touches the smoked paper. On now turning the cylinder a wave trace will be written on it by the vibrations of the fork.

To determine the number of vibrations made in one second by the fork, a good clock, accurately rated, sent at each second an electric spark from an induction coil out of the tracing point and through the paper. Thus the sinuous traces of the fork were punctured by electric sparks. The number of waves of the fork's trace contained between two of these punctures is the number of vibrations made by the fork in one second. A multitude of experiments showed that the range of the determination of the number of vibrations per second of the fork was very small, and that the means of several such measures did not vary from one another by more than 1-10th of a vibration, or, expressed in time, the variation did not surpass the 1-25000th of a second. This fact showed that the chronoscope, so far as its records were concerned, was sufficiently constant and accurate for measures on the velocity of projectiles.

The effect of temperature on the vibratory period of the fork had been determined in a previous research. It amounts to an increase of 0.05 of a second for each degree of temperature for an increase of 1 deg. Fahr. in the temperature of the fork.

The guns used in the experiments had rebounding locks. The primary current of an induction coil passed through a break-piece fixed under the rebounding hammer, so that at the instant the cartridge was exploded the electric current was broken and then immediately formed again. The current which passed through this break-piece was led by a wire to a small upright piece of tin plate whose front surface leaned against a thick copper wire. Another wire led from the tin plate (which stood in a shallow trough of mercury) back to the battery. One terminal of the secondary coil of the induction is connected with the axis of the metal cylinder, the other terminal with the foot of the fork.

This chronoscope is worked as follows: One person vibrates

the fork with a bow, and then brings the pointed foil down on the smoked paper, and rotates the cylinder. While the fork is marking its sinuous trace he cries "fire," and the other person discharges the gun at the tin plate. At the instant the cartridge explodes a minute spark issues from the tracing point of the fork and cuts a small hole through the blackened paper in the sinuous trace of the fork, and when the tin plate is knocked over by the shot another similar spark flies from the tracing point.

We know the distance between the branch of the gun and the tin plate, the number of flexures in the trace of the fork contained between the two spark holes gives the time the shot took to go over the known distance, whence the velocity of the shot per second is readily computed.

The fork used in these experiments made about 256 vibrations, or flexures, in the trace in one second; so if there should appear 32 flexures between the two spark holes the record would give 32/256th, or one-thirtieth of a second for the time of flight of the shot from the gun to the distant target. Two guns were used in these experiments, one of 12 the other of 10 gauge. They were "full-choke-bored," and were choked exactly alike. They were made by the Colt Arms Manufacturing Co. of Hartford, Ct.

The following tables give the results of our experiments:

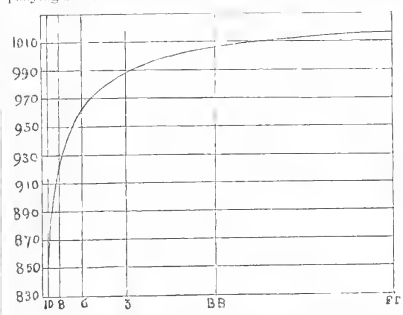
I. 10 Colt gun, 5 drs. Curtis & Harvey powder, 1½ oz. shot.				
Size of shot.	Vel. 20 yds.	Vel. 40 yds.	Vel. 50 yds.	
No. 1 buck.	1152	1067	1015	
BB.	1147	1132	1072	
No. 6.	1146	1126	1072	
No. 8.	1066	1056	1052	
No. 10.	1012	962	952	
No. 12.	955	880	875	
No. 16.	788	740	716	
II. 10 Colt gun, 4 drs. Curtis & Harvey powder, 1½ oz. of shot.				
No. 1 buck.	1017	967	967	
BB.	1009	947	897	
No. 6.	1009	911	872	
No. 8.	955	880	806	
No. 10.	890	824	776	
No. 12.	828	760	760	
III. 12 Colt gun, 5 drs. Curtis & Harvey powder, 1½ oz. of shot.				
No. 1 buck.	—	—	—	
BB.	—	765	687	
No. 6.	—	754	696	
No. 8.	—	729	680	
No. 10.	—	710	667	
No. 12.	—	680	670	
IV. 12 Colt gun, 4 drs. Curtis & Harvey powder, 1½ oz. of shot.				
No. 1 buck.	—	—	—	
BB.	—	722	671	
No. 6.	—	718	696	

Each measure of velocity given in these tables is the mean value obtained from several experiments, varying in number from three to six. The headings, "velocity, 20, 40 and 50 yards," mean that the numbers under them give the average velocities of the flight of shot over these distances, and not the velocities at 20, 40 and fifty yards from the gun.

It will be observed that the shot used was Nos. 10, 8, 6, 3, BB, FF, and No. 1 buck shot. They were so selected because a pellet of any number in the above series weighs very nearly double the preceding one. Thus, a pellet of No. 8 weighs double one of No. 10, a pellet of No. 6 weighs double one of No. 8, and so on. These relations of weight among the pellets were obtained so that I could readily reach the relations existing between the velocity of gun-shot and the weight of the pellet. The shot used was kindly furnished by J. Tatham & Bros., of New York, who used carefully gauged sieves in their manufacture. The powder used was Curtis & Harvey's Diamond Grain No. 6. The powder and shot in each cartridge fired had been carefully weighed out in an accurate balance.

A glance at the tables at once shows the rapid increase in the velocity of gun-shot from 10 up to 20 yds. 3. With the heavier pellets the increase in velocity is less marked. Thus, the table headed "10 Colt gun, 4 drs., Curtis & Harvey, 1½ oz. shot," shows that No. 8 shot has 72 feet per second velocity over No. 10 shot, and No. 6 has 46 feet over No. 8, while No. 4 has only 33 feet over No. 6, and BB shot gains only 11 feet over No. 3.

The relations between velocity and weight of pellet shown in this table may be taken as a type of all the experiments, and I have graphically shown their relations in the accompanying curve.



The divisions on the scale, measured from the bottom line upward, give the velocity per second of the pellets. One unit on this scale equals 20 feet of flight of a pellet, and a unit of the scale measured from right to left on the diagram, equals one unit of weight of pellet. The weight of a pellet of No. 10 shot is here taken as the unit of weight. The numbers of the shot are written under the horizontal line; the velocities on the vertical line. When the curve intersects these lines we find the velocity given on the vertical scale corresponding to the number or weight of shot given on the horizontal line of the diagram.

Professor Rice has found that this curve can be expressed by a mathematical formula. The curve is very nearly the curve of secants, and the formula for it is:

$$\frac{y}{x} = \frac{1}{\sin \theta}$$

Denoting by x the velocity, by y the weight of a pellet, and θ , b and a being undetermined constants.

This may interest if not amuse some of my readers who may remember a little of their mathematics. But the thought that shooting by mathematics will be found very unprofitable may console those sportsmen who have had the pleasure to forget all the formula they had ever learned.

So far as the experiments with these two special guns show, there is no doubt a great superiority in the 10 over the 12-gauge

gun, when each is loaded with the same weight of powder and shot. Thus, with the same charges of powder and shot (4 drs. powder and 1½ oz. shot) fired from the 10-gauge, gives a velocity of 100 feet per second more than that given by the 12-gauge. The fact is conclusively shown in the comparison of the figures in the two tables headed "10 Colt gun, 4 drs. C. & H. powder and 1½ oz. shot," and "12 Colt gun, 4 drs. C. & H. powder, 1½ oz. shot," and the difference in velocity in favor of the 10-gauge was in each of the sixty separate experiments, which were made to get the numbers (contained in the above mentioned tables) on the lines of No. 8 and No. 10 shot.

With No. 10 shot the mean velocity given by the 10-gauge gun over the first 30 yards is 848 feet. With the same charge in the 12-gauge the velocity is 748 feet, showing a difference of 100 feet in favor of the 10-gauge. With No. 8 shot the difference amounts to 70 feet. The average difference in favor of the 10-gauge in the flight of shot Nos. 8 and 10 over 40 yards amounts to 110 feet.

If we assume, as we certainly may without grave error, that the penetration of shot varies as the square of its velocity, these experiments will give the relative penetrations of the 10 to the 12-gauge about as 9 is to 7. These experiments show that the recent movement in favor of small-bore guns is one in the wrong direction. It appears that a 10, or even an 8-gauge gun, if of about 8 lbs. weight, would be the best fowling-piece for upland shooting.

That the 10-gauge shows such superiority over the 12 may be accounted for by the fact that the same charge occupies less length in a 10 than it does in a 12-bore, and hence there are fewer pellets in contact with the barrel of the former than of the latter to oppose by their friction the projectile force of the powder; and secondly, the powder in a 10-gauge is exploded nearer the centre of its volume, and thus does not have so much chance of blasting before it unburied powder contained in the portion of the charge removed from the point of ignition.

I also venture to predict that with the same weight of barrels the 10-gauge will not heat as much as the 12, because the motion of the shot lost by the greater resistance it opposes in a 12-gauge cartridge, must appear in the form of heat.

The third fact which these experiments show is that the proper charge of shot in a 12-gauge gun for upland shooting is 1½ oz. and not 1¼ oz., as has of late years been the practice to use; for the tables show that with 1½ oz. of shot and 3½ drs. of powder an average velocity is obtained which requires 4 drs. of powder to give 1½ of shot a velocity equal to that given by 3½ drs. to 1½ oz. Now, 4 drs. of powder, if not fired from a good weighing and measuring scale, is a very bad measure, and the result is a very bad shot. The effect on the body, and especially on the brain, is neither conducive to pleasant nor to good shooting. The number of pellets in a charge of 1½ oz. of No. 8 shot is 499. In a charge of 1¼ oz. of the same shot there are 419, therefore only 50 pellets more in a charge of 1¼ oz. than in a charge of 1½ oz.; and surely the want of the 50 will not cause a good shot to miss his bird with 499 pellets, nor will the addition of the 50 give him much more chance of bringing his bird to bag with his 499 pellets.

I wish now to show to the association, and especially to those members of it who are sportsmen, other applications of these experiments to the art of shooting on the wing.

There are two styles of shooting on the wing—one is called "snap-shooting," where the shooter, on selecting the bird which he wishes to bag, quickly brings the gun to his shoulder and the instant he has done so, and the bird is in the line of shot, he determines at the moment of fire the distance to which he should direct his gun ahead of its flight, this distance depending on the velocity of the bird's flight and on his distance from it. This manner of shooting is practiced the more generally by upland gunners in shooting quail, grouse and woodcock.

The other style of shooting may be designated as "the swing shot," in which the shooter swings his gun ahead of the bird, the right of the bird till he attains the proper distance ahead of it, and then fires; but he keeps his gun moving with a regular angular velocity till even after its discharge. This method of shooting is, in my opinion and from my experience, the proper method whenever it can be practiced, and is certainly the only one which has been found successful in the shooting of bay fowl, as ducks, brant and wild geese. Yet there are sportsmen who will contend that they merely follow the bird with the gun, and discharge it when it is pointing directly at the bird. I put this opinion to the test this summer in the following manner: Four wilets came over the decoys flying in line with a good speed. With my gun I followed the first bird coolly and accurately, and kept the gun moving regularly after its discharge. Instead of killing the first bird, the third from the leader dropped dead.

To give a rule applicable to all gunners for the distance at which a gun should be held ahead of a bird is not possible. Some sportsmen follow a bird, and then after reaching before it the proper distance, suddenly stop the angular motion of the gun and then fire. Others, after following the bird a short distance, give a quick, lateral motion to the gun and then fire. Others, again, bring the gun with a lateral motion ahead of the bird and keep the gun moving till their experience decides the proper distance ahead of its flight, and then fire while the gun is keeping its previous regular angular velocity.

For the simple illustration of the bearing of these experiments on the art of shooting on the wing I will suppose that at the moment of fire the gun is stationary; in other words, that we are firing "snap shots." If the bird has a velocity across the line of sight of 30 miles an hour (i. e., 44 ft. per sec.), and we are using charges in a 12-gauge gun of 3½ drs. of Curtis & Harvey powder and 1½ oz. of shot, we will have to shoot about 5 feet ahead of the bird if it is flying a distance of 30 yards, but 7 feet ahead of it at a distance of 40 yards, and 11 feet ahead of the bird if at a distance of 50 yards.

These distances ahead for cross shots at birds flying at the rate of 30 miles an hour may appear out of all reason with the experience of many sportsmen; yet if you will place a stick 5 feet long at 40 yards and ask the same gunners if they would follow a bird flying at 30 miles an hour, if it were going in a bold ahead of a bird by 5 feet, they would say, "from my experiments with them, that they will say, 'Of course; that is only about 18 inches,' so difficult is it to determine a length at a distance while sighting along the barrel of a gun."

I will conclude with the remark that the study of this paper will not make a good shot on the wing, no more than a description of how to perform on the violin will make an accomplished violinist. But the results of these experiments are of value, and cannot but improve the shooting of an accomplished sportsman if they are practically applied.

It has been said, perhaps rather strongly, "reading and

begin, the terminus of the Maine Central R. R. Stages every day to The Forks. Stage fare, \$3 from Skowhegan to The Forks. Expenses have been estimated. The first time I went aching I was gone eighteen days, and my expenses were a little over five dollars. "Lower Bunk" and party had better take the most of their estates with them; pork, etc., they can buy in Maine. The law is on ducking. There are plenty of good ponds where game is quite plenty up this way. The further any one goes back from Carrage Roads the better hunting and fishing. If "Lower Bunk" and party come this way I could take a map and show them in five minutes plenty of good places to camp out.

E. M. G.

LAST ECHOES OF DITTMAR SPORTING POWDER.

SACKETTS HARBOR, N. Y.

Editor Forest and Stream:

I am glad you have exposed the Dittmar Powder Co. I have used the powder two years but am done with it.

E. A. P.

CHICAGO, Oct. 10.

Editor Forest and Stream:

I read your Dittmar powder expose attentively, and I think you have done the right thing in the right way. There is no escaping your conclusions.

M. D. E.

St. Louis, Mo., Oct. 19.

Editor Forest and Stream:

By your expose of the "Dittmar Powder" I confidently believe you have saved many valuable lives, and if sportsmen heed the warning there will be a large credit due you in future.

E. H.

HARTFORD, Conn., Oct. 23.

Editor Forest and Stream:

I join hands with you on the raid on the Dittmar powder. I almost blew my gun to pieces with a cartridge of it one day, and threw away the balance of my canister.

T. S. S.

PHILADELPHIA, Oct. 23.

Editor Forest and Stream:

Thanks for your timely words of warning regarding the treacherous Dittmar powder. A number of us were just going to send over to New York for a supply to last us during our annual trip West. We, however, prefer to remain intact and will order black powder instead.

E. F. H.

(From the Springfield, Mass., New England Homestead.)

There is young blood at the head of the FOREST AND STREAM now. A late stroke of enterprise is a complete expose of the alleged quality of the Dittmar powder. Mr. Carl Dittmar doubtless thinks by this time that someone at the FOREST AND STREAM office knows as much about his business as he does himself.

WINNIPEG, Manitoba, Oct. 10.

Editor Forest and Stream:

My experience with Dittmar powder has been limited, but quite enough to satisfy any ordinary man. The only time I ever used it after the first discharge it was difficult to open my gun; the second time it was more difficult, and both the heads of the shells (U. M. C.) were torn off. The third time it started the breech of my gun, and this satisfied me that either I did not know how to follow the instructions or there was something wrong with the powder. I would not use the infernal stuff at any price. Fond as I am of shooting I would rather never fire a gun again than use Dittmar powder.

C. H.

BOSTON, Mass., Oct. 22.

Editor Forest and Stream:

Some two months since I loaded sixty brass shells and 100 paper shells with Dittmar powder. Following instructions in reference to having the powder well confined I used a hammer to ram down the two wads over the powder. After reading your articles in reference to Dittmar powder I charged not to use same, and proceeded to withdraw the charges from the shells. I found the powder caked together so hard in the shells as to require digging out with some sharp instrument. I desire to ascertain if there is any danger of the powder exploding under these circumstances.

BEFPO.

No danger if you use ordinary care in drawing the loads.

PHILADELPHIA, Miss., Oct. 12, 1880.

Editor Forest and Stream:

I received the No. 23, Sept. 30 and Oct. 7 numbers of FOREST AND STREAM the day before yesterday, and have been so completely absorbed in your able and satisfactory expose of the "Dittmar Sporting Powder," so called, that I have scarcely taken time to sleep. Unless this "stuff" called Dittmar powder is like the cat that is reputed to have nine distinct lives it is certainly dead for all time to come. It is impossible for me to imagine anything that you could have done that would have brought every sportsman so completely under obligation to you as the course you have taken in this matter. How I wish that I could have seen this exposition of the Dittmar compound before I fired the charge that caused the loss of my hand. It is certainly the greatest fraud and the most dangerous article that has ever been placed before the public. No one can feel more grateful to you for the part you have taken in this matter than myself. Although your exposition of Mr. Dittmar's explosive was too late to prevent the almost entire loss of one of my hands (that I would not have given for all the powder that Mr. Dittmar ever had, or ever will manufacture), it will show to those sportsmen who were disposed to censure me, that I was not altogether wrong in reporting my "Disastrous Experience with Dittmar Powder." If all who have had trouble with this explosive had made a fair and faithful report of the cases the whole thing would have been "squashed" long ago. You have taken considerable trouble to get to the bottom of the cause of these explosions with the Dittmar stuff, but when you consider that many lives and limbs (I will say nothing of valuable guns) may be saved by it, you cannot doubt that your action will be highly appreciated by all who place any value on their lives.

S. P. NASH.

It would undoubtedly have been to our immediate pecuniary advantage had we acceded to the demands of the Dittmar manufacturers, and instead of impartially investigating the powder, been content with letting them cover up its character. But the FOREST AND STREAM is not prepared to trade, at any sacrifice, its plain duty to its subscribers.

BLACK POWDER MIXED WITH DITTMAR.—Jersey City, Oct. 1.—Editor Forest and Stream: I perceive that Dittmar powder is coming into use to some extent in the first barrel in pigeon matches, and with good results on account of little smoke. I have used it to some extent during the past year, and found it pleasant and satisfactory to use, but too slow in ignition to give as good results in the field or the trap as black powder. This difficulty, I think, is entirely obviated by a mixture of say equal parts black and Dittmar to supply the sulphur in black powder to facilitate ignition throughout. It burns full as clean as pure Dittmar, gives only a moderate recoil, gives as good penetration as any (better than the pure article), and materially reduces the volume of smoke. It is for those reasons that I use it in the first barrel in all kinds of shooting, having been obliged to give up the pure article for various reasons some time since. I have been told in a discussion of this subject that priming the shell with say 1/4 dram of black powder, by putting it in first under the Dittmar, will give a quicker burning powder (as quick or quicker than black). I have tried it once or twice, but am unable to say whether it is better or worse from my limited experiments with this. From my understanding of your exposition of the chemical action of explosives it would seem that this would increase the danger by possible detonation, although the method of mixing the powder might be free from objection or this method of action in explosion. Please give me the answer in the future discussion of the question in your paper, or otherwise your views on the action and safety of the equal mixture and the possibilities also in case of imperfect mixing or uniformity of distribution of the different grains in the charge.

SUBSCRIBER.

The mixture of black powder with the "Dittmar Sporting Powder" quickens the explosion of the charge. Whether it increases or decreases the probability of detonation, which is always present when the nitro-cellulose compound is employed, depends largely upon the way in which the two powders are mixed. If the entire charge detonates the explosion would be more disastrous than the detonation of an entire charge of Dittmar alone. To load first black and then Dittmar above it is, as you will understand from our article of Sept. 23, extremely hazardous.

FIRST EXPERIENCES IN BATTERY SHOOTING.

THE morning of the 20th of October, a day long and wistfully expected, broke cloudy, threatening rain, and consequently, although we had expected to start at some unearthly hour before daylight, we did not get away before six o'clock. For weeks previously our genial host and myself had narrowed down our topics of conversation to haunts, stools, fenders, boxes, floats, etc., and when we got on the ground I was very anxious to see the rig set out, my anxiety being whetted by several and repeated detentions (Dittmar) from the West. As we went down the Bay we drove up an immense flock of ducks, I should think at least seven or eight thousand, and in what seemed a wonderfully short time my battery was out, and all the decoys, 150 of them, on the spot just vacated by the ducks. After some slight equibral difficulty I got into the box and lay down. By the way, *ce ca sans dire*, that all the readers of FOREST AND STREAM know, and that I am sure you will not forget.

And now came the critical moment. I had just got nicely settled and peered cautiously over the edges of the box (how it does crack one's neck to do it!) when all at once, from the direction I was not looking in, came whirr, whizz, clatter, about a thousand broadbills, some in front, some behind, right and left, over my head, almost into my face. I made a delirious grab for the gun and did actually manage to knock down two stragglers, but how I will not forever remain a mystery. So it went pretty well all day, the ducks seemed possessed to run up to the decoys and get shot—at.

With an innate modesty concerning my own achievements I am rather bashful in stating my score. Suffice it to say that I bagged somewhere near half a hundred broadbills, redheads and coots. Had an experienced gunner had my chance he certainly would have got at least a couple of hundred of the sport-furnishing birds.

In conclusion, as I am under keep a cake all to myself, I would advise every lover of the gun, so he be not of pot-bubbling proclivities, to his him either, get in battery and shoot, shoot, shoot till his shoulder aches. There are acres of ducks here, and the new law for Shinnecock Bay, which limits the gunning to three days in the week, will certainly insure capital sport for all, and last, but not least, mine host can take care of a man.

CHALACO.

ORANGE POWDER TRIAL.

MILBROOK, N. Y., Sept. 25, 1880.

Editor Forest and Stream:

The following is the result of an exhaustive trial of orange powder, manufactured by Laffin and Rand, with Tatham's chilled shot, conducted during the present week. The weather was remarkably fine, just enough breeze blowing to carry away the smoke.

The targets were a counterpart of those which have been used in other gun trials—viz., "a facing of 13 inch pine, 30 inches in width and 40 inches high, on which was fastened by spring clamps the sheet of paper for recording the 30-inch patterns. In the centre of each of these sheets was drawn a life-size tracing of a duck or pigeon, for the purpose of learning and testing the probabilities of killing game of such size at the various distances. And in the report of the trial the letter K is intended to indicate whether struck in such a manner as would insure killing, or missed. With small shot, including No. 6, the pigeon was used; with larger shot, the duck, which in outline represented a red-head. Through the centre of the facing was an aperture 7 by 9 inches, in the direct rear of which was the test for recording the striking force of the pellets, which consisted of a rack slotted at intervals of 3 of an inch, in which slots were placed sheets of straw-board of uniform texture and thickness. At each discharge the number of sheets perforated by any one pellet were carefully noted, and this constituted the record of force for that particular shot."

The recoil was measured by a machine similar to that employed by the London Field some two years ago. "The gun was secured by padded clamps, tightened by thumbcrews, to a hinged slide, which was free to move only in the line of the barrel. The gun's leather strap extended on either side and was fastened by means of a double wedge, which held a solid pad firmly against the heel-plate. This

leather strap took the chief strain of the recoil. Above the gun and fastened at one end to the hinged slide and at the other to the frame work of the machine was a spring balance, on the scale of which, smeared with paint, was recorded the distance to which the gun and slide were driven back by the force of the explosion, and when at rest a constant strain of sixty pounds was kept on the balance. When once in position the gun could be loaded and fired as often as required without re-aiming."

The powder used was furnished by Laffin & Rand and consisted of Orange Rifle, FG, Orange Ducking No. 2 and Orange Ducking No. 4. Tatham's chilled shot Nos. 3, 4, 6, 7, 8 and 9 was used. One of W. W. Greener's new trap guns 10-bore, choked, and weighing 83 lbs., was the weapon.

ORANGE POWDER.

Charge.	30 shots, 40 yards.—Summary of averages.									
	Average.	Force.	K.K.	Recoil.	L.B.	R.B.	L.B.	R.B.	L.B.	R.B.
Orange Rifle, FG.—4 1/2 drs.	217	224	17	17 1/2	10	10	10	10	10	10
1 1/2 oz. No. 7 shot.	217	224	17	17 1/2	10	10	10	10	10	10
Orange Ducking No. 2.—4 1/2 drs.	224	227	17 1/2	17 1/2	10	10	10	10	10	10
1 1/2 oz. No. 7 shot.	224	227	17 1/2	17 1/2	10	10	10	10	10	10
Orange Ducking No. 4.—4 1/2 drs.	251	17	16 1/2	10	10	10	10	10	10	10
1 1/2 oz. No. 7 shot.	251	17	16 1/2	10	10	10	10	10	10	10

TATHAM'S CHILLED SHOT.

30 shots, 40 yards.—Summary of averages.									
Charge.	Average.	Force.	K.K.	Recoil.	L.B.	R.B.	L.B.	R.B.	L.B.
Orange Ducking No. 2.—1 1/2 oz. No. 7 shot.	290	257	12	12	10	10	10	10	10
Orange Ducking No. 4.—1 1/2 oz. No. 7 shot.	235	247	14 1/2	14 1/2	10	10	10	10	10
Orange Ducking No. 2.—1 1/2 oz. No. 6 shot.	139	146	22	23	10	10	10	10	10
Orange Ducking No. 4.—1 1/2 oz. No. 6 shot.	108	110	30	30	10	10	10	10	10
Orange Ducking No. 2.—1 1/2 oz. No. 5 shot.	95	90	37	37 1/2	10	10	10	10	10

I confined my tests to chilled shot, as its superiority over soft is now so universally acknowledged that any tests of soft shot for publication would be utter nonsense. Two pink edge wads over powder and one black edge on shot were used throughout, and metal shells exclusively.

In an after trial I verified satisfactorily the finding that between two perfectly straight cylindrical-bored guns of precisely the same gauge, there is, and can be, no difference as regards the shooting. I have given this question a great deal of time and close attention, and hope to give you at some near day a report.

I have also demonstrated to my satisfaction that Orange powder has no equal, as regards strength and cleanliness. I have experienced during the past six months with nearly every brand of American powder, and would send you a copy of the details if it were not for occupying so much of your valuable space.

W. J. STORY.

THROUGH THE MAISE WOODS.—Mr. Thomas Sedgwick Steele's canoe trips have now extended over an aggregated distance of more than 600 miles. He has just returned to his home in Hartford from a second tour through the Maine woods. We clip from the Hartford Times the following brief account of the trip:

The party this season in addition to himself consisted of Colonel Lyman B. Goff, of Pawtucket, R. I., Mr. Steele's brother-in-law, and three guides, one of the latter the most celebrated Indian guide in the Maine region. The party left the Kineo House, Moosehead Lake, with three birch canoes, September 13, and reached Woodstock, New Brunswick, October 20, having paddled over four hundred miles through the very heart of Maine.

Those who are familiar with Mr. Steele's work, "Canoe and Camera," which contains the large map two feet square, can easily follow this last trip through the west branch of the Penobscot to Chebecook lake, and thence through the Umbagog stream, and the renowned difficulties of Mud Pond Carry to Chamberlain Lake. At this point, last year, Mr. Steele turned south, exploring the mysteries and beauties of the east branch of the Penobscot, but this season the party followed a northerly course, through Chamberlain, Eagle and Churchill lakes. Turning directly east they canoed through Spider Lake, crossed Osgood Curry to Echo and the Mansungung lakes, and following the windings of the Mansungung River entered the Aroostook waters. After passing the towns of Masardis and Presque Isle, they landed at Caribou, Maine, where they took cars to Woodstock, New Brunswick, and thence home. The hardest part of the trip was experienced through the swamps and over the mountains lying between Churchill and Echo lakes, which, although only fifteen miles, took the party over a week to accomplish. The season has been the driest Maine has experienced in years, and from first to last the canoeing of the stream was attended with great difficulty. On reaching the head of the Mansungung stream the party were finally obliged to camp several days and build "shoes" or sleds for the three canoes. For over thirty-five miles the canoes were dragged through the bed of the streams before they reached sufficient depth of water to float them, making an unexpected delay in the tour. The first cold snap of the season occurred September 24, while the tourists were in camp on Churchill Lake, forming ice an inch in thickness in the camp kettles and about the borders of the lake. They captured thirteen otter, beaver and mink, besides other game and fish. The journey was double the length of last year's, and the autumn scenery was equally enchanting. The tourists made several important geographical discoveries along the trip, which will be of interest hereafter.

CARELESS HANDLING OF A GUN.—The English journals report another lamentable accident from carelessness with a gun, the victim being a soldier of high standing and a V. C.

We consider it a duty to chronicle such accidents in order to impress upon each reader the possibilities which may befall the habitual use of a gun. We can none of us be too careful. The following from the London Telegraph bears directly on this point:

Another lamentable gun accident is recorded, causing the death of a gallant soldier and wearer of the Victoria Cross. Col. Hackett, late of the Royal Welsh Fusiliers. A rabbit-gun has destroyed the valued existence of a man who was present at the siege of Sebastopol, obtained the medal for the assault on the Redan, served all through the Indian mutiny, and won the badge for distinguished valor at Lucknow, where he rescued the wounded corporal of his own regiment, in spite of a heavy fire from the enemy. The deceased officer had been out rabbit-shooting, and in getting over a hedge appeared to have been careless enough to drag his gun through by the barrel, whereupon the piece exploded, and its contents lodged

in his body. Only a week or two ago a similar casualty took place in India, when the son of the Lieutenant-Governor of the North-west Provinces, Sir Ashley Eden, lost his life in the same way. Taking a loaded gun, he attempted to kill a snake by hitting the reptile with the butt-end of his weapon, forgetting the dangerous character of the instrument he was using. The gun went off, and the result was another pitiful death of a man in the prime of life through the incautions handling of fire-arms. Who does not remember the deplorable accident which put an end to the career of the celebrated African traveler and explorer, Capt. Speke? Yet such casualties ought not to occur, and would not occur if a reasonable amount of caution were exercised. Surely, in view of the sad waste of valuable life which happens every year through this cause, it is time that sportsmen and all who take a gun into their hands should remember that they are carrying sudden and violent death about with them, lurking somewhere between the stock and the barrel that they handle so confidently.

A HINT TO FARMERS.—In the confessions of Fitz-Boodle, by the late Mr. Thackeray, he outlines a series of remunerative professions which may be made available to strengthen and fortify a slender income. To this end there is a profession open to our farmers of which they have not with any degree of intelligence devoted themselves—the cultivation of quail.

Many agriculturists possess farms of one hundred acres and upwards. The land is available in almost every instance to the habitat of this bird. While the average American may ignore and defy the game-law, the law forbidding trespass enjoys in his eyes a slight respect. Now if every farmer, the possessor of land conforming to the necessary conditions, will encourage the propagation and protection of quail on his own premises, he will secure to himself within a brief period a most profitable crop and one which, less than any other, is subject to the vicissitudes of the weather. If he will erect suitable shelter at different points for the quail, where they may be fed and seek refuge during the storms of winter, if he will see to it that nests be not robbed and the incubating birds killed; that hawks, owls and other vermin are driven off—he will in the autumn find ample remuneration for his trivial labor. Let him but insert in a city journal an advertisement stating that upon his grounds may be found so many quail; that individuals, for whom he will find accommodation for so much, may for so much kill so many birds per day per man, and no more, he will promptly receive a remunerative return for his efforts. Moreover, if he uses a real game-law, and conform outwardly to the conventional forms required by rural ethics, he may, without loss of reputation, add still more to his revenue by putting the odds in dollars on the quail as against the sportsmen.—*Gaston Fay, in Harper's Weekly.*

VIRGINIA.—Warrenton, Oct. 20.—This fall will be a good one for the sportsman. The number of partridges and all kinds of game, thanks to a strict enforcement of the game laws, has increased enormously the last four years. From all sections of the State there comes the intelligence of good sport ahead, and in the upper part the slaughter of the birds has begun. But the late summer and intense heat of the present renders bird shooting so uncomfortable, that not until the 1st proximo will the real work begin. In all the tide-water counties of Virginia partridge shooting commences on November 1 and closes February 1. In all other sections of the State the open season is from October 15 to January 15. Gentlemen sportsmen desiring to hunt will find good quarters and fine grounds on the bottoms and low grounds of the Rappahannock River. There is no better in the State. Write to George Myers, Warrenton Springs, Fauquier Co., Va., for information. For deer hunting, quail and rabbit shooting, apply to Capt. William Bow, Littleton P. O., Sussex Co., Va. For ducks, geese, brant, Cobb's Island is the best place. Cobb and Spady can tell you all you want to know.

Sportsmen coming into Virginia are all welcome. Every farmer will give them full and free permission to hunt upon their lands. It is only the pot hunter that they are down upon. The second and third pay a small price. It is strange that the Virginia Midland Road does not follow this liberal example, for by charging a high tariff on pointers and setters it kills the goose that lays the golden egg, and keeps many sportsman away. It ought to be their object to induce the sportsmen to travel on their road, and to hunt all along its route; but by taxing his dog they repel thousands of huntsman annually from taking the trip. It is a penny wise pound foolish policy, for every dollar made by charging the dog they lose a hundred from their masters, who would cheerfully pay full price for themselves, but who hate to be imposed on.

LATER.—The day after writing you the Va. Midland R. R., on my representation, issued an order that dogs should not be charged, but carried free. CHASSEUR.

CONNECTICUT NOTES.—Windsor Locks, Conn., Oct. 25.—Partridge shooting has been dull for some time past, though there were a good many birds killed between Sept. 20 and Oct. 1. At Granby and East Granby quail shooting has been good all through the season. Quail are scattered considerably now, and cannot be found in bevis of more than six or seven, where three weeks ago the flocks had from twenty to thirty in. This is due more perhaps to boys and amateurs than to sportsmen, for the poor birds have been actually nearly scared to death. Woodcock are very scarce, a single bird being now and then raised. Gray squirrels are plenty, but are not found much in their old haunts, the scarcity of walnut driving them into other quarters. A hunter went out the other morning from Warehouse Point, and came in with Windsor and East Windsor they are said to be plenty. We have a horror of that mode of warfare. A recent visit into Litchfield County gave us some rare sport in moving and shooting partridges and quail. In two days our party moved over forty birds. We paid a visit to Green Pond, a lovely but lonesome sheet of water lying in Sherman, in Fairfield County, and had some fine times there. Mr. Charles H. Andrie, a prominent New York sportsman and fisherman, spent much time in summer there, and has a smaller pond, a brook inlet nicely stocked with brook trout, and has them, protected by Connecticut statutes. Mr. Andrie is an invalid, and finds much relief in that section. LOWER BUNK.

OHIO.—Oct. 23.—The storm of last week started the ducks South in large numbers, and it is said that more ducks

have been seen in this vicinity than ever before in so short a space of time. On Saturday last a number of our popular sportsmen made for their favorite shooting grounds, and the result of one day's shoot is given below: At Calmet, Mr. Abe Klineham killed 183 ducks, his brother Henry 136, and Mr. Heister about 140; same day, at English Lake, Almer Price bagged 52 and John Gillespie 45; at Tollock Lake, F. A. Howe, Esq., President of Tollock Club, brought down 91 ducks and a goose; at the Makawaka Club marshes, Mr. Roll B. Organ brought to bag 60 ducks. All of the above were products of one day's shoot, besides numberless others that I have no record of. At Fox Lake the shooting has been equally good. This evening a party consisting of the following well-known gentlemen start North for a deer hunt: Charles H. Mears, Milton Oliver, John Cowles, Lem. Brown, Jonathan Slade and Henry Sloan. They leave on the 5 p. m. train, via C. & N. W. R. R., for Oconto, Wis., thence about sixty miles up the river into the woods, where they go into camp for a two weeks' hunt. A more jolly party cannot be imagined, and with a "stand-pipe" in the party, the deer are liable to be brought to the coles, and no doubt they will be delicious morsels to the anxious sportsmen. Success attend them! Mr. Geo. B. Mansfield, of Connecticut, called this morning, fresh from a tour among the mountains of Colorado. He reports excellent sport among the deer since the first fall of snow. J.

ILLINOIS.—Buda, Oct. 18.—I see many reports from different sections of the United States as to the prospect for the fall shooting, and will tell how the game is in this section, 118 miles southwest of Chicago. We have the benefit of two good ducking grounds, one being a large swamp lying northwest of here, and the other quite an extensive lake, some fifteen miles southeast. Since the cold snap and high wind of the last few days the shooting has been most excellent, mallard being in the majority. No geese or brant have come in yet. Quail are abundant; jacksnipe and plover are plenty, and prairie chickens seem to get thinned out very slowly. Farmers are opposed to the gunners shooting on their farms, for the average city hunter never closes a gate or puts up a rail after he has passed through, and in many cases fences are kicked down regardless of the stock and crops of the honest farmer. F. E. C.

MICHIGAN DEER-SHOOTING.—Grand Rapids, Oct. 21.—Ducks are very plentiful on Indian River in the northern part of this State. One day last week three gentlemen bagged 161 as the result of a day's sport. This river is a connecting link between Burt and Mullett Lakes, and which, with the B. V. and C. L. Ry., Crooked Lake, Crooked River and Cheboygan River, form what is known as the "Inland Route." The distance from Petoskey (northern terminus of the Grand Rapids & Indiana R. R.) to Cheboygan, via this route, is about fifty miles. If the reader will refer to a late map he will find them shown as follows: Crooked Lake, Crooked River, Burt Lake, Indian River, Mullett Lake and Cheboygan River. Near where the Indian River empties into Mullett Lake, probably a row of half an hour, is the Lake View House, where sportsmen will find good accommodations within easy reach of good sport. The editor of the Petoskey Record, in passing through Crooked River a few days since, saw four handsome deer from the steamer. The region cannot be too highly commended to the tourist and sportsman, being easy of access, with very low round trip rates from June 1 to Oct. 31, which are offered by the G. R. & I. R. R. Co. To the sportsman or pleasure-seeker the trip through the "Inland route" is one to be "marked with a white stone," forever after. A beautifully illustrated guide will be published next season fully describing this and kindred attractions of Northern Michigan, which can be obtained free by addressing the General Passenger Agent at Grand Rapids, Mich. F. J. M.

GAME IN THE ADIRONDACKS.—It is singular that almost all our sportsmen who go to the North Woods do so at a season when game is scarcest. According to our Northern exchanges now is the finest time of the year to be there. Hunting up in the Adirondacks is unusually good at present. The deer are plentiful there they have been before in many years; the woods are fairly alive with partridges, and the ponds and lakes to remote regions offer wonderful attractions to the duck shooter. A letter just received from Moose Lake, about forty miles from North Creek, says the hunting there was never better. Elijah Camp, the noted Indian guide, while out on a long tramp last week, discovered three large ponds within four miles of his shanty at Moose Lake that had probably never before been visited by white men; in all his journeys through the wilderness in that region he had never before caught a glimpse of them, nor to his knowledge had any other hunter or trapper there. He was much surprised at the number and delicacy of the deer he had found around each pond, which, he says, exceeded anything that he had previously noted in all his experiences in the North Woods.—*Utah Journal.*

NO DUTY ON WILD RICE.—Huronwood, Oct. 20.—*Editor Forest and Stream:* One of the greatest drawbacks to the sale of my wild rice in the United States has been the duty of two cents per pound, which I now find has been unjustly levied upon it. Last fall I was informed that the two cents per pound was the duty, and I advertised the fact, feeling some doubts upon the subject. I secured the services of a friend, and he, making some inquiries at the Custom House, received as answer a note, of which the inclosed is a true copy. Please publish this and the inclosed letter in justice to your readers and myself. CHAS. GILCHRIST, Fishery Inspector.

"CUSTOM HOUSE, Rochester, N. Y., October 15, 1880."

"E. U. Burton, Collector of Customs:
"Dear Sir:—Referring to the duty on 'wild rice,' I am instructed by Mr. Galusha to say that there is no duty on the same. Very truly,
W. L. WALLACE,
"Deputy Collector."

TENNESSEE GAME.—Nashville, Tenn., Oct. 19.—The quail season is now fairly opened, and our sportsmen are having a good time. Birds are very abundant and the weather all that could be desired. Buckholz has a trio of beautiful dogs—"Prince," a pure Laverack; "Jeff," a red Irish setter; "Belle," and a white pointer. The latter is a prodigy worth mention, as he stood and retrieved the first bird he ever saw. H. C. Pritchett, Esq., is out very often, and being one of the crack shots of our town, never fails to bring home a full bag. The beautiful moonlight nights we are now having induce our lovers of fox chasing to be on the *qui vive*, and often the delightful music of a pack in full cry can be enjoyed by the

less fortunate inhabitants of the city. Col. Johnson's pack is as fine as any in the State, and a run after them is a joy not soon forgotten. Game is beginning to be brought in from Reelfoot Lake. This is undoubtedly the best hunting and fishing grounds in the South. J. D. H.

WHERE TO GO FOR LARGE GAME.—St. Elmo, Chaffee Co., Colo., Oct. 14.—Deer, elk, bear, mountain lion and smaller game are very plenty in the mountains between Canon City, in Fremont Co., and the South Arkansas, in Chaffee Co., Colorado. Most of the deer (black tail) have left the Continental Divide, crossed the Arkansas River and entered the mountains between the river and the South Park. For good sport among all kinds of large game, and with the easy access by railroad it is hard to find any that will beat Texas Creek, Pleasant Valley and Badger Creek along the line of the Denver & Rio Grande R. R., from thirty to sixty miles from Canon City. If any Eastern sportsman wants to try his favorite ride on elk, black tail deer, mountain sheep, antelope, cinnamon and black bear, mountain lion and smaller game, why all he has got to do is to get a camping outfit and good blankets and come to one of the above-mentioned points and he will find plenty of game. H. H. H.

LONG ISLAND SPORTSMEN'S ASSOCIATION.—The Executive Committee of this Association will meet in the Royal Arcanum Room, in Music Hall, at junction of Fulton and Flatbush avenues, Brooklyn, on Friday evening, Oct. 23, at 8 o'clock, at 8 o'clock. At that time an estimate of expenses of next State Convention will be presented as a basis of assessment on subscribers, and the Subscription Certificates will be ready for delivery. Prize Committee to be appointed. Reports from committees on ground and traps will be expected. The Washington Gun Club Quartette are invited to be present to sing sportsmen's songs. Every member of the association is cordially invited to attend. ABEL CROOK, Secretary L. I. S. A.

SABRATH MARABERS.—New York, Oct. 25.—*Editor Forest and Stream:* For the last three Sundays my party have been going to Pascack, N. J., and openly violating the game laws, not only by shooting on that day, but by killing quail and other birds protected by the laws. If they had been arrested last Sunday it would have cost the party \$472 for fines, yet no one interfered. I procured the services of a constable and searched every train Sunday evening and this (Monday) morning. We found one party, but they had no birds and were badly frightened. I also got a Justice of the Peace to issue a warrant against them, so much so that if they shot that day he would arrest them, so probably they will now give it up; but it shows how little our game law is enforced. W. HOLBROOK.

PATTERNS.—Philadelphia.—*Editor Forest and Stream:* Have just read "St. Clair" on gun trials. I think he must have run into an extraordinarily fine lot of guns or his 40 yards must have been very short measure. I do not doubt but what once in a very great while guns can be found to put 361 shot in a 30 inch circle with $\frac{1}{2}$ oz. 8 shot, but I am sure if you go to buy an ordinary B. L. gun with the expectation of getting one to make the above pattern at 40 yards with $\frac{1}{2}$ oz. shot, full choked, 99 times out of 100 you will go home with the impression that your gun is inferior to many. I think. The above pattern would be extraordinary with $\frac{1}{2}$ oz. shot, and I am sure that your readers can convince themselves by testing their fine shooting guns in public. J. R.

A NEW HUNTING GROUND.—Owen Sound, Ont., Oct. 18.—Think some of your readers would like to know a new hunting ground for deer, bear and other large game. To get it start from Owen Sound in a rig, travel about 15 miles to Oxenden, northeast; there shoot for a few days, then continue up the Peninsula about forty miles to Lion's Head. Go back from five to fifteen miles from this place and deer, bear, etc., are to be found in dozens, not to speak of fish of almost every variety. The whole country is covered with small deep lakes. Or take the boat from Owen Sound to Lion's Head directly. There is a boat twice a week. HORD.

NEW YORK.—Hay's Corner, Seneca Co., Oct. 19.—In Romulus and Ovid game is now quite scarce; quail having been killed off so close last year there are but few to be found anywhere in Seneca County. Partridge are scarce; a few plover have been seen though none brought to bag to my knowledge. Sunday shooting, I am pleased to state, has gradually diminished; there are a few yet who will get out of sight of more sensible and civilized men, and hang away with old muskets etc., much to the disgrace of the community wherein they reside. L. E. N.

FOREST AND STREAM GENERAL PASSENGER RECORD.—East Saginaw, Mich., Oct. 15.—The following is a list of hunters that went "up into the woods" via the F. & P. M. R. R., for the week ending Oct. 15:—Mr. Dye and party of 41 from Dayton and Columbus, O., to Reed City; party of 6 from Union, Ind., to Ogenaw; party of 8 from Columbus, O., to Roscon; party of 12 from Dayton, O., to Harrison; party of 37 from Toledo and northern Ohio, to Cayley, Mantion and vicinity, making a total of 105 in six days.

CHICAGO, ILL., Oct. 20.—En-route to the hunting grounds of Michigan, via the Ch. & N. W. Ry., are: W. C. Girard and party of twelve from Lebanon, Ind., going to Quinnesec, Mich.; G. L. Barnes and party of four, from Equinunk, Pa., going to Florence, Wis. CHICAGO, ILL., Oct. 22.—The following party is en-route today to the hunting grounds on the Chicago & Northwestern R. R.: J. Gregory and party of ten, from Zainsville, O., going to Quinnesec, Mich. W. H. S.

INDIANA.—Vincennes, Oct. 19.—Quail are not as plenty this year as usual, in fact, there are not half the number in the lower part of the State as there were last year. The weather is fine, but the marshes are very dry. H. S.

CANADA.—Perth, Ontario, Oct. 19.—I am off to-morrow for a hunt, fifty miles North, and on my return will probably drop a line to FOREST AND STREAM on deer hunting in Canada. A. C. S.

CURETICK.—A party of sportsmen passed through this city last Tuesday on a route to Currituck. Among them were Messrs. W. A. Croyden, A. H. Copeland and J. C. Bates, of Massachusetts. They had their dogs with them and were equipped for an extensive campaign. As they are all good shots we shall look for reports of a big bag.

PENNSYLVANIA FIELD TRIALS.

party, who bit viciously at the gates as we passed. The Dalmatian or carriage dogs, black and white spotted fellows, with lavender eyes, are the Princess's favorites, and she has one constantly with her. A party of very raggy Skye terriers were next to a beautiful Chinese dog, the fac-simile in color and almost in shape and size of a young lion. The Scotch collies, with their black, wavy coats; the ugly brown and white retrievers; the cunning little weasels, pots the Prince; the Sussex spaniels, the white Newfoundland, spotted with tan; the English greyhound, and the Scotch deerhound were all represented.

The keeper knew every one of them by name, and made his presence doubly welcome by the bits of meat biscuit he threw to them. Finally, leaving the noble family of dogs, we passed into a separate yard, in the centre of which we could see a deep, brick-lined pit, in which were sleeping two black bears, "Folly" and "Charlie." On hearing the keeper's voice, they set up a great whining, and "Charlie," a tremendous black fellow, climbed like a cat up the rough trunk of a tree which was firmly fastened in the centre of the pit. Reaching the top, on which was a board about two feet square, he rose on his hind legs, balancing himself carefully, and begged for a cracker. He was not more than his own length from us, on the same level, but, poor fellow, even with temptation, he was incapacitated from making a jump by his clumsy figure. When he descended Polly took her turn, and begged in quite a comical way for a bit.

"They are American bears, given to the Prince by the Duke of Manchester," and the keeper, adding, with a sort of awe, "I suppose you see them most every day there, ma'am." Then we called at the monkey house, and saw the queer, uncanny little animals the Prince brought from India with him, and, in addition, a cage of white rats and white mice, which, said the guide, "the Princess brought from Jamaica, for they are regular boys and like anything that runs on four legs, even these nasty creatures," he concluded, with an air of infinite disgust. Leaving the monkey house we walked some distance to the next cow stable, of red brick and white facings, where a dozen or more of beautiful Alderneys are kept, and on to the prettiest little cottage that could be devised, known as the "Princess's Dairy."

Imagine a tiny building of brownish-red brick, jutting out in quaint little gables, miniature bay windows, and odd porches, and fairly festooned by some beautiful vine with feathery foliage and great purple star-like blossoms, tangled up with damask roses and sprays of ivy. Then think of a beautifully carved bar of Swiss workmanship, life-size, with a basket on his back ready to hold the incalculable treasures. Then open the door and you find yourself in the tiniest sort of milk room, with a tiled floor and marble tables, upon which stands, in porcelain pans, the rich milk for royal use. Here it is that the fair Princess of Wales, *à la Marie Antoinette*, comes with noble lords and ladies to make butter in a silver churn, and afterward to spread it on wafer slices of bread, and have it with her tea in the tiny room adjoining, to which no one is admitted but the Princess's most intimate friends.

NOTES FROM FOREIGN EXCHANGES.

QUITE a vigorous discussion has been going on recently in the columns of some of our English contemporaries between two sets of correspondents. One party maintains that a game-keeper has a right to shoot or otherwise destroy any dog found trespassing on his master's property, while the other denounces this view of the case, not even admitting that a dog can be shot while following game.

There have been a number of decisions, bearing on this subject in the English courts, which appear to amount to this: that a dog may be shot if it is in the act of pursuing and "if the game could not otherwise be saved from destruction."

A Norwich (England) firm have recently invented a new kennel, with yard, which will be a very great convenience to dog owners. The house can be made of any size and can be provided with a separate yard for each compartment. It is made of wood with a corrugated iron roof supplied with gutters and leader. The yards are six feet square, the railings iron and fitted with a gate and padlock and with reversible troughs. The invention is certainly a great improvement on anything now in use.

In the sheep-dog trials held at Ulverston, October 18th, there were thirty-nine entries of dogs and bitches. The money prizes offered amounted to £71, besides three cups valued at 5 guineas each, presented by the Duke of Devonshire, the president of the Northwestern Counties Sheep-dog Trials Association, for 1889.

Bright, the first prize dog in the Local Stakes, on his first trial failed to pen his sheep in 11 minutes, but on a second lot penned in 7½ minutes.

Fan, the first prize bitch, had a bad lot, but penned in eight minutes.

In the All-aged Stakes Rob, first prize, worked wonderfully well and penned in 94 minutes.

Bess, first prize bitch, penned by careful work in eight minutes.

In the Puppy Stakes Mr. J. Wood's dog Bright took first, and Guilty, who had taken second in the Local Stakes, took first prize for bitches, penning in 5½ minutes. The work displayed by all the dogs entered was excellent.

The celebrated greyhound bit Bit of Fun, owned by Mr. Thos. Sharpless, of Forest Bank, Craven, Boath, England, died October 18th. She was the winner of over ninety prizes. Among the victims of the recent dreadful colliery explosion at Seaham, England, was a collier, named Ramsey, whose remains were so disfigured that at first another body was taken for his. A Newfoundland dog belonging to Ramsey's father, when the first corpse was taken to the house of the deceased, appeared to be greatly enraged and barked almost continuously, when, however, the mistake had been discovered and when Ramsey's body was brought to the house it ran to the coffin with every manifestation of pleasure, and could scarcely be induced to leave it while it remained in the house.

FIRST FOX OF THE SEASONS—*Cazenovia, N. Y., Oct. 25.*—Dr. E. C. Bass' party were out to-day for the first time and killed a fox. W. D. Smith was the fortunate one. We refrain from saying how many times this same party were out last season without shooting a fox, or telling how many times they got one with a spade. HAMMERLESS.

—The idea of having field trials in a locality where there were no birds, as was the case with the late Nebraska trials, "is a thing that no fellow can understand."

THE first field trials held under the auspices of the Pennsylvania State Field Trials Association were commenced on Tuesday, at Quarryville, Lancaster Co., Penn. Among the well-known sportsmen of the State and the Eastern cities present were: R. J. McClure, J. R. Stayton, Secretary of the Association; J. R. Hendricks, W. C. Beerning, J. S. McIntosh, James Verner, Ed. Gregg, B. F. Wilson, H. M. Short, Walter Passavant, D. McK. Lloyd, J. Palmer O'Neil, President of the Association; F. A. Tremaine, of Pittsburg; W. A. Coster, of Flatbush, L. I.; S. C. Dixon, of Philadelphia; T. S. Thompson, Thompson, Pa.; Albert A. H. Meredith, of Boston; J. M. Taylor, of Lexington, Ky.; Jos. J. Snellingburg, of New Brighton, Pa.; W. L. McConnell, of New Castle, Pa.; Wm. Senger, of Glenfield, Pa.; T. A. Smith, of Stockholm, N. J., and Geo. W. Porter, Jr., of Harrisburg, Pa.

An early start had been arranged. A special train had been chartered to run down to Quarryville, a small village which lies about fifteen miles to the southeast of Lancaster, and at nine o'clock we found ourselves putting down with the judges, contestants, dogs and a number of the residents of Lancaster, among whom was P. A. Diffenderfer, in whose hands the arrangements of all the detail of the trials had been placed. It was not until eleven o'clock that the destination was reached. Before going on the grounds a glance at the official entry book showed that it had closed with 43 entries, of which 17 were in the All-aged Stakes, 13 in the Puppy, 4 in the Nursery and 9 in the Association. The following were the

ENTRIES—ALL-AGED STAKES.

J. R. Stayton, Pittsburg—Setter dog Belton III. (Belton-Floss), b w and t.
J. R. Hendricks, Pittsburg—Setter dog King Dash (Belton-Floss), b w and t.
Isaac Yearley, Jr., Coatsville—Setter bitch Roxey (Leicester-Tambora's Nellie), b and w; setter bitch Countess (Leicester-Pocahontas), b and w; setter bitch Little 'Lady' (Dash III.-Roxey), b and w.
Wm. Senger, Glenfield—Setter dog Doctor (Macon's Ranger-Penn), b w and t.
H. C. Steinhilber, Middletown—Setter dog Pat No. 2 (York-Comtesse), red; setter bitch Eddy (York-Comtesse), red.
J. J. Snellingburg, New Brighton—Setter dog Buton (Boh-Fair), l and w; setter dog Thunder (Pride of the Border-Fairy II.) blue belton; setter bitch May Laverack (Thunder-Spot), b and w.
L. Shuster, Jr., Philadelphia—Setter bitch Cornelia (Leicester-Dash), b w and t.
W. L. McConnell, New Castle—Setter bitch Lady Laverack (Thunder-Peers), l and w.
F. A. Diffenderfer, Lancaster—Setter bitch Leah (Royel-Livy II.), b and w.
F. W. Seiler, Harrisburg—Setter dog Dash (Colburn's Dash-Mulien's Belle), b w and t.
E. A. Givens, Pittsburg—Setter bitch Mierva (Leicester-Nellie), b w and t.
Samuel S. Brown, Pittsburg—Setter dog Dash — roan.

PUPPY STAKES.

Isaac Yearley, Jr., Coatsville—Setter bitch Little Lady (Dash III.-Roxey), l and w; setter bitch Boss (Penn-Pocahontas), b and w.
W. A. McIntosh, Pittsburg—Setter bitch Abbey W. (Elcho-Gipsy Queen), red.
Wm. Senger, Glenfield—Setter dog Mack (Rake-Penn), b w and t.
J. J. Snellingburg, New Brighton—Setter dog Black May (Lester-Spots), b and w; setter bitch Daisy Laverack (Thunder-Peers), lemon belton; setter dog Dick Laverack (Thunder-Peers), blue belton.
W. L. McConnell, New Castle—Setter bitch Lady Laverack (Thunder-Peers), lemon and belton.
Geo. W. Porter, Jr., Harrisburg—Setter dog Dart (Seiler's Dash-Porter's Bessie), red and w.
Edward Gregg, Pittsburg—Setter dog Bob (Stondard's Bob-Nellie), red.
D. McK. Lloyd, Pittsburg—Setter dog Ned (Stondard's Bob-Nellie), red.
F. A. Diffenderfer, Lancaster—Setter dog Roxey Boy (Dash III.-Roxey), b and w.
J. M. Speer, Harrisburg—Setter dog Comet, black.

NURSERY STAKES.

J. R. Hendricks, Pittsburg—Setter bitch Dolly Edwin (King Edmore-Cartree), liver.
Wm. Senger, Glenfield—Setter dog Smart (Rake-Penn), b and w.
J. J. Snellingburg, New Brighton—Setter dog Pet Laverack (Thunder-Peers), blue belton; setter bitch Sue Laverack (Thunder-Peers), lemon belton.

ASSOCIATION STAKES.

J. R. Stayton, Pittsburg—Setter dog Belton III. (Belton-Floss), b w and t.
J. R. Hendricks, Pittsburg—Setter dog King Dash (Belton-Floss), liver w and t.
J. J. McIntosh, Pittsburg—Setter dog Biz (Dash-Flora), red.
J. J. Snellingburg, New Brighton—Setter dog Thunder (Pride of the Border-Fairy II.), blue belton; pointer dog Buton (Boh-Fair), liver and w.
Isaac Yearley, Jr., Coatsville—Pointer bitch Rosy (Leicester-Nellie), b and w.
W. L. McConnell, New Castle—Pointer bitch Lady Laverack (Thunder-Peers), lemon and belton.
E. A. Givens, Pittsburg—Pointer bitch Mierva (Leicester-Nellie), b w and t.
Samuel S. Brown, Pittsburg—Pointer dog Dash (—), roan.

The judges were Major J. M. Taylor, of Lexington, Ky.; B. F. Wilson, of Pittsburg, Pa., and Washington A. Coster, of Flatbush, L. I.

TUESDAY, OCTOBER 26, 1890.

ALL-AGED STAKES, at 10 o'clock. First prize, \$100; second prize, \$50, and third prize, \$25.
Stenham's Pat against Brown's Dash.
Stayton's Belton III. against Shuster, Jr.'s Cornelia.
Snellingburg's Thunder against Yearley's Roxey.
Diffenderfer's Dash against Snellingburg's May Laverack.
Seiler's Dash against Hendricks's King Dash.
Yearley's Countess against Snellingburg's Buton.
McConnell's Lady Laverack against Yearley's Little Lady.
Senger's Doctor against Stenham's Biddy.

Shortly after eleven a.m. the first brace was ordered down, and Pat, handled by T. W. Ferrington, and Dash, winner of second in the free-for-all at Patoka, Ill., in the N. E. F. trials of last year, by H. M. Short, made the start. The weather in the morning was clear, with a good scolding wind blowing from the southwest, but later on clouds began to thicken and the rain to patter down, and the scarcity of birds made the first day's work extremely tedious; so that at the end only two heats had been run and one remained unfinished. We saw at once that the trials had been arranged for too early a date, the birds were said to be under size, the frost had not cut down the rank grass in the old fields nor trimmed the trees, and many of the farmers were at work in their fields, which more or less disturbed the birds and drove them to the woods. Added to this, the birds had been shot off, and with one exception the better money was lost. The best day through several beautiful valleys, such as only seen in the Keystone State, the long stretches of flats being hemmed in by rolling hills, covered with highly cultivated farms, many of which were

so tidily kept as to deprive even the fence rows of the slightest cover. The first field was an old clover lot; the dogs were shipped at the leeward end, and it was down blank. When half way down the first lot—Dash, who was by far the better dog, pointed, drew on and pointed a flock of fifteen fowls, but left the dog when ordered; and this field also proved a blank. The next field was a rag-weed one, and in it a levy of birds had been senttered by a local hunter. He was requested to leave, but not before he had driven what he had left of the birds into the woods. The dogs were served on the judges ordered the dogs, and the letdown, which was covered by the lately fallen leaves, proved a poser, for neither of the dogs showed game. A cornfield was then beaten out, Dash quartering his ground with good speed, and showing excellent style as he varied to his work. Pat also worked under good conditions, but was behind the scenes alongside of Dash. An hour had now elapsed without a find, when a shout from the noble army of spectators announced that a bevy had been flushed by the crowd. It was then learned that five birds had been marked into some chestnut sprouts. The dogs were ordered into the brush, and Dash at once found and pointed magnificently. Pat was given a chance to back, which he refused to do, working up instead and sharing the point in an uncertain way, which resulted in a flush. The dogs were ordered up and the heat awarded to Dash.

Belton and Cornelia were then called, but the latter was not forthcoming.

Thunder and Roxey came next, handled by their owners, and commenced operations in a fine rag-weed lot. Thunder went like lightning winning great sport. The other dog, which was going over about half the ground. At the far end Thunder suddenly stopped and drew on at his belly and came to a drop. Roxey refused to back, indeed she seemed to have no notion when the gun was ordered to flush, but pulling back a moderately dressed roost was found. The dog-cornfield was tried without success, but at the bottom, in a springy meadow, a looker-on flushed a fine bevy, which skirted some low alders and pitched into the woods beyond. The rain was now falling fast, and the crowd, making slowly in a cove, flushed the remnant of another bevy. The judges ordered the dogs into the woods, and Thunder had no more than crossed the fence when he made a dropping point. A short delay occurred in giving Roxey a chance to back, which she did not, nor, in crossing ahead of her, did she show game. The dog was then ordered to back, but to kill, but no birds were moved. It was evident that Thunder pointed where a bird or more had struck, but had refused to lie on account of the wet leaves. If it was not a false point it was next door to one, and we think he should have gone on after due time and tried the birds to where they were eventually flushed by the noise several yards away. A move was then made for the other bevy, which had scattered along the fence. Thunder got a capital point at once, and Mr. Yearley claimed a point for Roxey on same bird. The dogs were then called back, but not recovered. Three more panels of the fence further on Thunder pointed, but this time a rabbit. In the next field when the dogs were up, Mr. Snellingburg moved a broken bevy and killed a bird quite wide of him, which Thunder located and retrieved in first-class style. The dogs were then called back and Thunder and Dash were ordered to back.

Leah and May Laverack, Seiler's Dash and King Dash were called in order, but one or other did not respond, it having been understood that the all-aged stakes would not lead off in the trials.

Countess and Buton fell in, the former being handled by T. E. Smith, and the pointer by his owner. Fruitless search was made, several miles of lowland was made, and it was not until the starting point of the morning was reached that a feather was found, the little bitch then flushed one bird deliberately. To sum up the characteristics of the two dogs, the little bitch showed a great deal of handling. She was fast with plenty of better, and what is ever valuable in a dog, she did not lack persistency. There was everything to discourage, and yet she was full of go to the end. Her action was good, her perhaps shade too low to suit some, but not for me. The pointer was intelligent, not a donee, and she was not a little better than had a chance. At 4:15 p. m. the dogs were ordered up for the day. In next week's issue we will give the full account and finish of the trials.

CURRENT DOG STORIES.

I.

The Council of Brantford township have recently offered a fee for each dog killed. One innocent old gentleman saw a cur, and, instead of lopping off the tail, carried the carcass bodily before a magistrate and got his check. Then, taking the body away, he cut off the tail, exhibited it and got another check. Yet once more he tried the venture, and this time it was to cut off and present the head, and he got still another check! Another spotless youth of ten summers drowned a litter of pups and got \$2 apiece for their tails.—*Paris, Ont., Transcript.*

II.

John T. Haymond had a curious experience at Lincoln, Nebraska, while acting in the trial scene as *Colonel Siders*. Two dogs began to fight in the centre aisle of the theatre, and all attention was instantly diverted from the stage to the fight. "I move we suspend proceedings in this court," said Haymond, "and I'll let a dollar on the white dog." "I'll take you," cried a man in the audience. The white dog won, the dollar was passed across the footlights to Mr. Haymond, and the acting of the play was resumed.—*Evening Post.*

III.

An interesting fight was seen at the waterworks this morning. Superintendent Hamilton has a small terrier dog that knows every nook about the works, and knows where things belong. This morning an alligator got out of his cage and started for the river. At the time the dog was playing along the water's edge. It saw the alligator as it was about to enter the stream, and immediately comprehended the situation. The alligator was out of its proper place, but there was no time to give an alarm. The dog immediately started for the scaly trespasser and caught it by the tail. A bitter fight then ensued. The dog attempted to pull the alligator up the bank to its cage. It also appeared to try and give an alarm, but seemed afraid to open its mouth lest its hold would slip and the alligator would get away. At this point in the battle the tide turned. The alligator caught the dog by the neck and gave him ample time and cause to raise an alarm. The dog did so. The men who had been witnessing the fray came to the dog's rescue. Their appearance frightened the alligator, which released its hold and endeavored to get away. The dog again seized it by the tail, pulled it to the bank and held it securely until the men could put it into its cage.—*Tulsa News's News.*

A mutilated five-dollar note was received at the Treasury to-day from Marion County, Indiana, and redeemed. Accompanying it was the following affidavit: "Before me, John E. Scott, a notary public in and for said county and State, comes Walter Rivers, who, being duly sworn, deposes and says that on or about the 23 day of September, 1890, in the city of Indianapolis, a dog owned by the deposant did feloniously and with malicious intent seize a five-dollar bill numbered B 256,469, series 1875, and bank number 40, and after chewing off the right-hand lower corner and the entire left-hand edge of the aforesaid bill, in spite of all due effort on the part of the deposant, succeeded in swallowing the same, and no amount of after effort in choking the aforesaid dog availed to re-

cover the torn portion of said bill; and, furthermore, deponent declares the said dog to be duly licensed by the city of Indianapolis under No. 187, taxes paid in full to May 1, 1881, and seeks to obtain from the Hon. Treasurer of the United States all proper relief in the shape of a new five-dollar William. The new bill was sent. — *Washington Star.*

KENNEL NOTES.

NAMES CLAIMED—Bragg—Vandura.—J. Otis Fellows, Hornellsville, N. Y., claims the name Bragg for black dog, and Vandura for a white dog, whelped May 20, by Wildcat co-Little Bull-terrier, now dead. **Drey Jones.**—Mr. Geo. D. Macdonald claims Drey Jones for black cocker dog, whelped August 1, by Herbert's Dick out of Dnelos imported Beauty (bred in Ottawa, Ont.) **Abelina.** for black cocker dog pup whelped Oct. 25, by Wildcat out of champion Coon. **Irish.** for black cocker bitch whelped Oct. 19, by Rollo out of Madcap.

Sales—Victor-Lucy Whelp.—Mr. N. Elmore has just sent to Dr. F. H. Redwiler, Chillicothe, Ohio, an English beagle dog pup, out of Lucy by Victor. **Echo II—Dell.**—Dr. J. J. Jennelle has sold from his Echo II—Dell litter of Irish setters, to Thos. Osborne, De Quoin, Ill., a dog, to T. D. George, Lonsdale, Ky., a bitch. **Presentation—Ray-Delta Whelps.**—Mr. H. W. Livingston has presented to Dr. John Thornley, U. S. N., Charlottesville, Va., a white and lemon dog pup, and a liver and white dog pup, by Ray out of Delta.

Whelms—Kathleen.—Mr. James Watson's imported Irish terrier Kathleen, third in the miscellaneous class at the New York Show, 1889, two dog pups by Mr. Leake's Tim of Toronto. **Norah.**—Dr. J. S. Nivens, of London, Ont., imported Norah, by Spring out of Nellie, seven puppies, four dogs and three bitches by Mr. Frame's dog, of Comber, near Belfast, Ireland. **Madcap.**—At the Lachine kennels, Oct. 19, the black cocker bitch Madcap, six pups, four dogs and two bitches, to Robertson's Irish champion Co. six pups, four dogs and two bitches, to Burr Hollis' Wildcat (black).

Bred—Dayton.—Dr. J. J. Jennelle's Irish setter bitch Dayton (Rob-Duck), litter sister to his Dell, has been bred to his Echo II.

The Rifle.

RANGE AND GALLERY.

WORCESTER, Mass., Oct. 23.—Yesterday the Worcester Light Infantry, Co. C. Second Regiment M. V. M., had their annual shoot. The distance was 200 yards with a possible score of 25. The principal scores and the prizes awarded are as follows: The first prize was given by Capt. Child, who commands the company. It is a gold pin supporting an arch marked "First Prize." From the centre of the arch hangs a tiny knapsack inscribed "Co. C. 2d Regt. M. V. M." Below is a target with two guns crossed over the face, while below all hangs the company's monogram, "W. L. I." This prize was awarded to F. A. Hatch for a score of 19. The second prize a silver target hanging from the company's monogram, was received by H. Haynes, his score being 18. Mr. F. L. Allen ranked third with a score of 14.

Thursday, the 21st, the City Guards, Co. A. Second Regiment M. V. M., had their annual target shoot and observed the fortieth anniversary of their organization. The prizes awarded and the scores made were as follows: First prize, the company gold medal, awarded to Capt. E. R. Shunway for the third time, score 17 points second, Sergt. James Early, score 16, a gold chain and charm; third, Geo. N. Lougee, score 15, an alarm clock; fourth, William H. Morse, score 15, an order for a hat; fifth, William E. Aldrich, score 13, a pair of sleeve buttons; sixth, William G. Tainter, score 12, a scarf pin; seventh, George W. Bemb, score 11, a pocket knife; eighth, Thomas S. Danforth, score 2, a leather medal. Mayor Kelley, in presenting the last prize, called the recipient the hero of the occasion, and informed him if he always were it next to his heart it would keep off the rheumatism and the neuralgia. To the past members the following prizes were awarded: To Warren Willard a cane, score 16; to Lieutenant Forbes B. Fay, score 14, a paper weight. In the evening there was a banquet at the Bay State House, which is owned by Messrs. Pond & Shepard, who are well-known sportsmen.

MANHOOT RIFLE GALLERY—Boston, Oct. 22.—The third week in the Inaugural Rifle Match has shown some good shooting, and the best so far this month. Mr. George F. Ellsworth, of the Gardner Rifle Club, was nearly successful in getting a clean score of eight consecutive bullseyes. He made a splendid 39; his fourth shot was a two-o'clock four, close to the two-inch bullseye. Mr. E. F. Richardson, of the Massachusetts Rifle Association, also was nearly successful in getting the extra prize. His fifth shot was a five-o'clock nipper, so close as to split the bullet. Both Mr. Ellsworth's and Mr. Richardson's scores were fine, and worthy of especial mention. Mr. Richardson heads the list with 191 out of a possible 200; his five scores of four 3's and one 39 will be hard to excel. Mr. Frank Hollis, of the Medford Rifle Association, is second with 189, he having increased his score two points over last week. The following is the standing of the several competitors to date: 50 yards; rounds, 8; possible 40; five scores to win, or possible 200:

E. F. Richardson	38	35	38	39	191
Frank Hollis	37	35	38	39	189
J. W. Potter	36	37	38	39	187
G. F. Ellsworth	36	37	38	39	187
Geo. D. Edson	36	36	36	36	182
Chas. B. Robinson	35	35	35	35	175
A. Goodspeed	34	34	34	34	170
Chas. B. Ous	34	35	35	35	174
G. Warren	34	35	35	35	174
S. S. Fager	34	35	35	35	174
R. C. Sawyer	34	35	35	35	174
J. F. Withersell	34	34	34	34	170
G. T. Hart	34	34	34	34	170
R. D. Haley	34	34	34	34	169
P. J. Snow	33	33	33	33	165
A. Shunway	32	32	32	32	160
Geo. Estes	32	32	32	32	160

Boston, Mass., Oct. 23.—An erratic wind and strong light met the short-range riflemen who faced the butts in the early part of the shooting at Walnut Hill. The attendance was not large, but the shooting was first-class. The few entries in the autumn match are hardly worth mention, consequently only one is given, that of Mr. Harris, which is capital. The 500 yard off-hand match did not fill largely, and owing to a sharp shower which occurred no scores were ticked, the participants being driven to shelter with wet traps, while the scorer watched the targets from the observatory under the hill. Following are the best scores only in detail:

The Creedmoor Target.												
R. S. Harris	5	5	5	5	5	5	5	5	5	5	5	5
J. Nichols	4	5	5	5	5	5	5	5	5	5	5	5
R. Davis	4	4	5	5	5	5	5	5	5	5	5	5
J. R. Fellows	5	5	5	5	5	5	5	5	5	5	5	5
J. Borden	4	5	5	5	5	5	5	5	5	5	5	5
C. H. Eatebrook	4	4	5	5	5	5	5	5	5	5	5	5
E. A. Bove	4	4	5	5	5	5	5	5	5	5	5	5

The Massachusetts Target.												
R. Davis	9	9	10	10	11	11	11	11	12	11	11	11
W. H. Jackson (NH)	9	9	10	10	11	11	11	11	12	11	11	11
J. Nichols	11	12	8	8	10	10	10	10	12	10	10	10

The Amateur Match.												
R. S. Harris	5	5	5	5	5	5	5	5	5	5	5	5

MAGNOLIA RIFLE GALLERY—Boston.—The third week of the October match has shown good work. Outside of the regular competition an improvised match was shot with rifles at 100 feet between Mr. T. C. Banks, of the FOREST AND STREAM, and Mr. R. F. Schaefer, a well-known shot of this city. The conditions were fifteen shots. Mr. Schaefer won by nine points, his total being 58, and Mr. Banks, 49. The summary shows what has been done with the rifle and pistol as follows—100 feet; possible total, 250:

Rifle Match.												
R. F. Schaefer	47	46	47	48	47	47	47	47	47	47	47	47
R. F. Farnham	45	45	45	46	46	46	46	46	46	46	46	46
J. C. Rogers	44	44	44	45	45	45	45	45	45	45	45	45
S. S. Fager	43	43	43	43	43	43	43	43	43	43	43	43
W. H. Henry	42	42	42	42	42	42	42	42	42	42	42	42
J. C. Rogers	41	41	41	41	41	41	41	41	41	41	41	41
G. A. Gross	40	41	41	41	41	41	41	41	41	41	41	41
M. S. Hardy	39	39	39	39	39	39	39	39	39	39	39	39

Pistol Match.												
N. C. Stone	4	4	4	4	4	4	4	4	4	4	4	4
J. B. Oshorn	4	4	4	4	4	4	4	4	4	4	4	4
W. H. Henry	4	4	4	4	4	4	4	4	4	4	4	4
J. R. Harter	4	4	4	4	4	4	4	4	4	4	4	4
J. J. Ross	4	4	4	4	4	4	4	4	4	4	4	4
F. Williams	4	4	4	4	4	4	4	4	4	4	4	4
J. E. Harter	4	4	4	4	4	4	4	4	4	4	4	4
W. Smith	4	4	4	4	4	4	4	4	4	4	4	4
W. Brown	4	4	4	4	4	4	4	4	4	4	4	4
C. L. Nichols	4	4	4	4	4	4	4	4	4	4	4	4

On Friday, Oct. 29, the Raymond Sportsman's Club have their regular meet; also a team match with the New Bedford.

NEW HAVEN, Ct.—The Second Annual Rifle Tournament of the Connecticut Brigade opened on the Quinnipiac Range, Oct. 21, and ran through two days very successful work. The first brigade shoot of the Guard was held at the same place last fall. Then twenty-nine company teams and five regimental teams (counting the fifth battalion) competed. This year but nineteen companies and three regimental teams were entered. In the brigade are forty-six companies.

The officers of the meeting were well satisfied with the prospect, however, considering the great political excitement and the dissatisfaction that resulted from the First Regiment marksmen being allowed to carry off prizes last year won with alleged irregular rights. Among those present at the range this forenoon were General Smith and Majors Watson, Stetson and Bissell and Lieutenant Colonel Morgan of the brigade staff; Colonel Barbour of the First Regiment; Colonel Croft of the Fourth Regiment. Major Fisher and his Hartford Post Guard team were present, this company last year being unrepresented. There were no entries at all from the Third Regiment.

The shooting was kept up without intermission all day, excellent luncheon being furnished on the ground.

In the company team match, open to teams of eight from any company in the Brigade of 1890, scoring on a bronze statue, the 200 and the 500 yards distances. The largest number of points that could be made were 280. These were the scores:

	200 yds.	500 yds.	Total.
Co. E. New Britain, First Regt.	219	195	414
Co. K. Wallingford, Second Regt.	219	195	414
Co. I. Meriden, Second Regt.	219	195	414
Co. F. Hartford, First Regt.	200	195	395
Co. B. South Manchester, First Regt.	200	195	395
Co. H. Hartford, First Regt.	199	195	394
Co. A. Waterbury, Second Regt.	190	185	375
Co. A. Hartford, First Regt.	186	185	371
Co. K. Stratford, Fourth Regt.	186	185	371
New Haven Co. Post Guard	150	165	315
Co. B. Bridgeport, Second Regt.	150	165	315
Co. E. New Haven, Second Regt.	149	165	314
Co. F. New Haven, Second Regt.	149	165	314
Hartford Co. Post Guard	136	128	264
Co. B. Hartford, First Regt.	135	121	256
Co. D. New Haven, Second Regt.	135	121	256
Co. A. New Britain, First Regt.	131	118	249
Co. D. South Norwalk, Fourth Regt.	131	118	249
Co. F. Norwalk, Fourth Regt.	130	115	245

The prizes, 11 in number, were awarded to the company in the order given above. The prize for the highest individual aggregate score in the match went to Lieut. G. C. LaBarre, Co. K, 2d Regiment, his score being 61.

The principal prizes in the company team match were: First, the Derby cup, valued at \$100, awarded to the 200 yards team, valued at \$25; third to tenth, prizes aggregating in value \$125.

There were also shooting on the two days of the meeting in an individual match at 200 yards, seven shots to each man, thus making 35 the highest possible number of points. There were 18 prizes, valued at \$130, the first being the Winchester sporting rifle, valued at \$30, the second \$15 cash and the third \$10 cash. The prize winners were: Sergeant J. W. Crane, Co. I, list, with the Winchester rifle with a score of 33, E. W. Whitlock, Co. E, 2d, taking the second prize with the same score. Lieut. J. L. Osgood, Co. E, list, was third with 32, and Gen. S. R. Smith, Private E. H. Williams, Co. F, 1st Regiment, Quartermaster Sergeant Harry Nichols, 4th Regiment, and Private B. Lewis, Co. E, 2d, each made 31.

The Second Regiment, under Capt. K. Wallingford, won the regimental silver cup for the second time, and Co. L. Meriden, gets the clock offered by Capt. Allen, I. T. P. of the Second Regiment. Private Whitlock, Co. E, wins the Col. Smith medal, and Capt. Allen, I. T. P., the Lieut. Col. Bacon medal.

The regimental team match opened at 1 o'clock on the 22d, and came to an abrupt unfinished termination, the signal gun for the closing of the match having been fired without the knowledge of the commanding officer of the range, Major J. E. Stetson. At the time of the shooting, probably about the middle of the afternoon, Graham, of the 2d, protested against this action, as an injustice to the leading team and a violation of the Creedmoor rules, under which the match was shot.

CREEDMOOR—Oct. 20.—The second series of the Seabury matches was shot at Creedmoor, under the most favorable conditions; the match was well attended chiefly by the long and short-range New York amateur riflemen, as professionals are debarré by the conditions in all of the Seabury matches. The weather was splendid, especially for the short-range men. The scores put up by them, particularly in the first-class, were by far the best yet rolled up in any match. Nearly all of the crack shots were present. In addition to these was added Chas. E. Elydenburgh, an old habitue of the range, who shot in the first international match and who was here on a visit from the far West. He was very warmly welcomed.

While the short-range men were in their glory the long-range men had a very troublesome time of it. The wind was field, and the dense mirage (the so-called "Gin and Sugar" atmospheric condition) before the targets prevented marksmen from locating their shots. At 800 yards this difficulty has a very trifling effect, but at 1,000 yards, the distance shot at, it forms a thick, wavy, dizzy veil in front of the targets. Still the shooting at this distance under difficulties pleased "Old Reliable," Colonel John Bodine, who was the executive officer of the long-range match, while Seely Donaldson did the honors for the short-range men in both classes.

Prize winners in long-range match.—Distance, 1,000 yards; highest possible score, 100:

S. T. G. Dudley	95	J. P. Waters	91
R. G. Bodine	93	A. Veier	87
R. L. Morse	93	J. H. Todd	91
John Bodine	92	R. Simpson	89
A. H. Cobb	92	D. F. Davis	87
A. H. Cobb	92	F. H. Holden	87
Thos. Lamb, Jr.	92	A. Melnes	86

Short-range.—First-class riflemen; off-hand; 200 yds.; highest possible score, 90:

A. Melnes	88	F. J. Donaldson	65
J. H. Brown	65	J. H. Roche	65
F. J. Donaldson	65	A. H. Cobb	65
W. H. Dunlap	67	J. A. Todd	64
D. F. Davis	67	P. Red	64
W. H. Dunlap	67	J. White	64
G. J. Seabury	66	N. O'Donnell	64
A. H. Anderson	66	Captain J. C. Mallory	62
F. J. Donaldson	66	J. H. Roche	62
A. B. Banks	66	J. A. Mangin	62
Chas. E. Elydenburgh	65	T. J. Dolan	62
C. E. Taylor	62	C. E. Taylor	62

Winners.—Short-range, second-class riflemen; out of a possible 70:

D. Miller	66	Swift	57
C. Riggs	65	Gregory	56
A. Kieles	65	Higgins	56
W. H. Dunlap	65	J. H. Roche	56
W. Simpson	62	J. H. Meeker	53
J. A. Grove	61	Cadwell	52
W. E. Dunlap	59	W. E. Dunlap	51
Farrall	59	Delaney	51
Klein	51		

WATERTOWN, N. Y., Oct. 7.—The annual meeting of the Watertown Rifle Association began to-day at the range on Bradley street. Following is the record:

First match open to all members of "O" company, Thirty-fifth Battalion N. G. S. N. Y., in good standing. Remington military rifle; 200 and 500 yards. Prize, gold medal champion badge, presented by Captain Miller. This match was very interesting, the shooting being excellent at both ranges and the contest between Messrs. Zimmerman and Reeves being very close and exciting. Both gentlemen exhibited a great amount of nerve and skill. In the scores it will be observed that several men made the same totals. Those, however, are considered best which increase in numbers from the start. The score is as follows:

	200 yds.	500 yds.	Total.
Zimmerman	5	4	4-21-43
Reeves	5	4	4-21-43
Luther	5	4	4-21-43
Baker	4	3	4-19-41
Settle	4	3	4-19-41
Rickey	4	3	4-19-41
Miller	4	4	4-20-44
Adams	3	3	4-17-42
Settle	3	3	4-17-42
OTIS	4	3	4-18-41

The next shoot was a subscription match open to all comers. Any rifle, 200 yards, seven rounds. The score was as follows:

Reeves	50	Miller	50
Zimmerman	50	Settle	50
Luther	50	W. Cooper	50
Baker	50	Cooke	50
Luther	50	Adams	50

The next competition was for the association match. Open to all members of the Watertown Rifle Association. Any rifle; distance, military rifle, 500 yards; special rifle, 600 yards; Creedmoor rifle, 700 yards. All at the 2d class target. Prize silver cup medal, to be won at the spring and fall meeting of the association and to be won three times before becoming the property of the winner. This match was the most exciting of the day. Reeves had already made the best score when Zimmerman shot, and he was obliged to make a bull's eye the last shot or fail to win. He made it and now holds the medal, he having won it three consecutive times by the scores of 37, 39 and 44. The score is:

scores of 37, 39 and 44. The score is :										
Zimmerman.....	4	4	5	5	4	4	6	3	5	5-44
Reeves.....	4	5	4	5	5	4	5	4	5	5-44
M. Cooper.....	5	5	4	4	5	5	4	4	4	5-44
W. Cooper.....	5	5	4	4	5	5	4	4	4	5-44
Adams.....	4	5	5	5	4	4	4	4	5	4-44
Baker.....	4	5	4	4	4	4	4	4	4	4-44
Settle.....	4	5	4	4	4	4	4	4	4	4-44
OTIS.....	4	5	5	5	4	4	5	2	4	4-44
Luther.....	4	2	5	4	4	3	5	5	5	5-41
Ruthey.....	5	5	5	5	2	5	3	5	5	5-41
Smith.....	4	5	5	5	4	4	4	4	4	5-41
Miller.....	4	3	2	4	3	5	3	3	2	3-41

members of the Watervliet Rifle Association. Prize, a challenge gold badge. The score stood:

Zimmerman.....	44	Wm. Cooper.....	38
Miller.....	41	Reiley.....	35
Farley.....	39	Oris.....	36
Adams.....	38	Smith.....	36
Reeves.....	38	Baker.....	35

SYRACUSE, N. Y., Oct. 20.—The fall meeting of the Sixth Division Rifle Association opened to-day on the range at East Syracuse. There were present a numerous gathering of militiamen and rifle shots from Central New York, representing several organizations of the National Guard. The weather was not so favorable for good marksmanship as it might have been, but despite the latter coldness of the air and the prevalence of a strong breeze, some excellent shooting was done. The programme of matches and the results were as follows:

Subscription Match—Open to all comers; 200 yards; any rifle:

Jones.....	4 5 6 5 4 5—32	Auer.....	4 5 2 4 4 5—25
Blackely.....	4 4 5 5 5 4—31	Mantel.....	3 4 4 2 4 5—25
Altman.....	4 4 4 5 5 3—29	Smith.....	3 4 4 4 3 3—25
Farley.....	3 5 4 4 5 3—29	Catlin.....	2 5 4 4 4 3—25
Wingard.....	4 4 4 4 4 4—26	Burdick.....	4 2 3 4 3 4—24
Abler.....	3 4 3 3 5 4—25		

Sixth Division N. G. Match—Open to teams of twelve from each regiment, battalion or separate company of infantry in Sixth Division. Remington rifle, State model. First prize—To the regiment, battalion or company, whose team make the highest aggregate score, a Trophy, value \$100:

Forty-Fifth Regiment, of Oswego.

	200 Yards.	500 Yards.	Total.
Houghton.....	4 4 4 4 3—21	4 4 5 3 4—22	46
Perkins.....	4 4 5 4 5—21	3 5 4 5 5—22	43
Barnes.....	3 4 4 4 4—19	3 4 4 4 5—22	41
Barlow.....	3 4 4 4 4—19	3 4 4 4 4—19	40
Bullivant.....	3 5 4 3 4—19	3 5 4 3 5—20	39
Eadie.....	3 4 4 4 4—17	3 4 5 4 5—21	38
Miller.....	3 4 4 4 4—17	3 4 5 4 4—19	36
Watson.....	3 5 4 4 4—21	4 3 5 4 3—14	35
Deftusha.....	4 5 4 4 4—22	3 5 3 3 4—18	34
Cleaving.....	3 5 3 3 3—17	4 3 3 2 4—16	33
Perkins.....	3 4 4 4 3—17	2 4 5 2 3—16	33
Clapp.....	3 4 4 4 3—17	2 4 3 0 4—13	32

Fifty-First Regiment Team of Syracuse.

	200 Yards.	500 Yards.	Total.
M. J. Makely.....	4 3 4 3 4—18	4 4 4 4 4—20	38
R. Griffin.....	3 4 4 3 4—19	4 4 3 3 4—19	38
W. B. Toulum.....	4 3 4 3 4—18	3 5 5 5 5—21	39
J. W. McElroy.....	4 4 5 3 4—19	4 4 5 5 5—21	40
L. L. Lyman.....	4 3 5 4 4—19	3 5 4 4 4—18	37
W. R. Kendall.....	4 3 4 3 4—19	4 4 4 3 4—19	38
L. A. Whitcomb.....	4 5 3 4 4—21	3 4 3 5 5—20	41
W. G. Hildebrand.....	4 3 5 3 5—17	3 5 3 3 3—19	36
C. G. Lowland.....	4 3 4 3 4—19	3 5 3 3 3—19	38
A. H. Fortness.....	3 3 4 3 4—13	3 5 0 2 0—10	23
M. L. Levee.....	4 4 0 5 5—18	4 4 4 5 4—21	39
D. A. Butler.....	4 4 4 4 4—19	2 4 5 3 4—19	38

Company Team Match—Open to teams of five from any company or troop in the Division. Remington rifle or carbine; 200 yards; rounds, seven:

Company A, Forty-First Regiment.

Barnes.....	29	SHAW.....	25
Perkins.....	29	Miller.....	23
Total.....	58		48

Troop C, Yates Dragoons.

Jones.....	50	Galloway.....	50
Mantel.....	22	Smith.....	24
Abler.....	23		
Total.....	95		74

Company D, Fifty-First Regiment.

Levee.....	25	Randall.....	25
Lyman.....	27	McElroy.....	25
Kendall.....	26		
Total.....	78		75

Company G, Forty-First Regiment.

Bullick.....	25	Chapman.....	22
Deftusha.....	23	Patterson.....	24
Watson.....	25		
Total.....	73		70

Thirty-Fifth Separate Company.

Burdick.....	54	Satterly.....	20
Cavada.....	28	Wheeler.....	18
Eddy.....	25		
Total.....	107		38

Officers' Match—Open to all commissioned officers in the Sixth Division; 200 yards; Remington military rifle or carbine; rounds, seven. To the highest individual score, an officer's gold badge, worth \$30, to be won at three regular meetings of the Sixth Division Rifle Association, to become the property of the winner:

M. Canava.....	3 5 4 4 4—25	M. L. Barnes.....	4 4 5 5 4—23
W. B. Randall.....	3 5 0 4 4—19	W. B. Barnes.....	4 4 5 5 4—23
C. A. Butler.....	3 4 4 4 4—19		

Directors' Match—Open only to Directors of the Sixth Division Rifle Association; 200 and 500 yards; Remington military rifle or carbine; rounds, five at each distance. Prize—Directors' gold badge, to be competed for at each regular meeting, and held permanently by the winner of three contests. The badge has been won once by Major Nichols, once by Capt. Birchmeyer, once by Lieut. Col. Griffin, once by Capt. Auer, and was held by Col. A. C. Chase for 1879:

	200 Yards.	500 Yards.	Total.
W. B. Chapman.....	4 4 4 3—19	3 5 5 5—20	39
W. B. Randall.....	3 5 4 4—21	3 5 5 4—20	41
M. Auer.....	5 4 3 4—21	3 5 4 4—21	42
R. Griffin.....	4 4 3 4—21	4 5 4 4—22	42
W. A. Butler.....	3 4 4 4—19	3 5 4 4—21	40
Col. Houghton.....	3 5 4 5—22	3 5 5 5—22	44

On the second day of the meeting the long-range match only remained for contest.

SCHUTZEN NOTES.—Hoboken, Oct. 21.—At the annual meeting of the Hoboken Schutzen Corps, held at their headquarters, 66 Adam street, the majority of the members were present to hear the annual reports of the secretaries and treasurer, which were read, and showed that the corps is in a prosperous condition. The result of the election for the coming year was as follows: Wm. Bremaner, Captain; H. Inetich, Cur. Secretary; J. Widman, Fin. Secretary; G. Neicher, Treasurer; O. Keller, Trustee; F. Rait, First Lieutenant; M. Stappenbeck, Second Lieutenant; A. Schless, First Shooting Master; H. v. der Leith, Second Shooting Master. A motion to procure new uniform (instead of the green blouse) was adopted. Preparations for a ball, to be held in February, 1891, was left to a committee.

STOCKTON RIFLE RANGE.—Camden, N. J.—The Directors of the Stockton Rifle Range, of Camden, N. J., announce the matches for November, and say:

"This being the last programme of the season, the officers and directors of the Stockton Rifle Range Association take this opportunity to return thanks to their numerous patrons for the liberal encouragement given them, and to inform them that the additions and improvements necessary to make Stockton what its advantages of location and facilities of access entitle us to expect it to become—the most popular range in the country—will be completed before next spring, and the season of 1891 will open with a new range of 1,000 yards in addition to those now in use, and it is earnestly hoped that our friends will continue to give it their support, and that those who have availed themselves of the recreation offered by the noble pastime of rifle-practice will continue to patronize the range that has in such a short time become their favorite resort."

The programme includes the following:

November 1—Sharpe's Match for Military Rifles, Second Series.—This match will open Monday morning at ten o'clock, and remain open until 20 scores have been made, when the rifle will be awarded to the competitor making the highest score of the 20. Immediately thereafter another competition will be opened and a rifle awarded to the highest score of the 20 made, and so continued until the 15 competitions of this series is completed. Competitors can thereby shoot between ten and four o'clock on any day in the month except Sundays. Open to all comers; 200 yards; ten rounds; Sharpe's military rifle, without cleaning. Competitors having won a rifle in the first series of Sharpe's matches, with a score of over 40, will be handicapped two points in these competitions.

The Association has provided a Running Deer target, which will be run as a bullseye target on Tuesdays, Thursdays and Saturdays. Deer to be run by signal from the firing point only; any rifle, including repeaters; as many shots as practicable may be fired during each run. Tickets entitling the competitor to one run will be sold at ten cents each. A fine of ten cents will be imposed for not firing, for firing while the deer is out of bounds, or for hitting the haunch. Firing is only allowed while the deer is crossing a space 90 feet long in the centre of the run, which requires about five seconds.

November 13—Champion Marksman's Badge of 1890.—Open to all members of the Second Brigade, National Guards of New Jersey, 200 and 500 yards; five rounds at each, with the military rifle in use by the State. This badge will be awarded to the competitor who, at the close of the season, shall have won it the greatest number of times. In case of a tie, the highest aggregate score of all the competitions participated in up to that time to decide.

November 20—Hunter's Match, for Rapidity and Accuracy at the Running Deer Target.—Open to all comers; 100 yards; any rifle (including repeaters), no wind gauge to be used, but sights to be over the centre of the barrel; six runs, as many shots as practicable to be fired during each run and while the deer is within bounds.

November 25—Thanksgiving Day—Turkey Rifle Match.—100 yards; Position, off-hand; Weapon, any rifle under the rules; turkeys to be placed so that the head only will be exposed—to be killed outright before being awarded as a prize; entrance fee, 25 cents, and ten cents per shot; number of shots unlimited.

Same Day—Glass Ball Subscription Match.—Weapon, any rifle not over .22 calibre; ten shots; entrance fee, 50 cents; re-entries permitted, but only the highest score to count.

BERKELEY, Cal., Sept. 25.—The rifle teams of the Oakland Light Cavalry and of the University met to-day on the University's shooting range. The University team was victorious by four points. 200 yards. Score as follows:

	University Team.		University Team.
Col. Edwards.....	4 4 4 4 4 4—40	McGillivray.....	4 3 3 4 4 4—34
McGillivray.....	4 3 3 4 4 4—34	Hayes.....	4 3 3 4 4 4—34
Hayes.....	4 3 3 4 4 4—34	Prick.....	4 3 4 4 4 4—35
Prick.....	4 3 4 4 4 4—35	Bromes.....	4 3 4 4 4 4—35
Bromes.....	4 3 4 4 4 4—35	Newman.....	4 3 4 4 4 4—36
Newman.....	4 3 4 4 4 4—36	Berry.....	4 3 3 4 4 4—35
Berry.....	4 3 3 4 4 4—35	Denyer.....	4 3 3 4 4 4—35
Denyer.....	4 3 3 4 4 4—35	Story.....	4 3 3 4 4 4—35
Story.....	4 3 3 4 4 4—35	Marlin.....	4 2 3 4 4 4—35

Light Cavalry Team.

H. I. Bromley.....	4 3 3 4 4 4—34	Marsh.....	4 4 4 4 5 4—41
Marsh.....	4 4 4 4 5 4—41	McKilken.....	4 4 4 4 5 4—41
McKilken.....	4 4 4 4 5 4—41	Kellogg.....	4 4 4 4 5 4—41
Kellogg.....	4 4 4 4 5 4—41	Phil.....	4 4 4 4 5 4—41
Phil.....	4 4 4 4 5 4—41	Elliott.....	4 4 4 4 5 4—41
Elliott.....	4 4 4 4 5 4—41	Goodwin.....	4 4 4 4 5 4—41
Goodwin.....	4 4 4 4 5 4—41	W. B. Bromley.....	4 3 3 4 4 4—34
W. B. Bromley.....	4 3 3 4 4 4—34	Gilmore.....	4 4 4 4 5 4—41

The Cavalry used carbines and the University the short cased rifle.

Yachting and Canoeing.

THIS YEAR'S RECORD.

THE season now closing has been in many respects the most successful in the history of American yachting. If devoid of sensational features, such as "grand events," "great festivities" and similar ostentatious display, it has seen a more rapid growth of "true yachting" than any of its predecessors. There has been quite as much racing done and fully doubled the amount of cruising. A gradual change in the sentiment of those who seek their sport on the deep has been working for some time and has cropped out in a more promising degree this season than ever before. We allude to the extension of the yachting franchise to seamen; rapid substitution of sailing for the love of sailing in place of the mere owning of big yachts for the display of wealth or for the indulgence of social excesses. If the sensational writers of the day, who love to report in the huge headlines of a paper in answer to a craving for authority, have found but little food for their pens, those who wish to see the sport elevated in America to the same thorough sailor standard it has long occupied in England can congratulate themselves upon the rapid strides we are making in that direction.

The modifications now going on in tonnage, model and rig all point to the successful creation of a large body of intelligent graduates in the art of sailing, a body of men who will have knowledge and confidence enough to cut adrift from the leading-strings of professional smack men and their antiquated notions of what constitutes a yacht and to what a yachtsman should limit his aspirations in the way of cruising. In constant communication with a thousand correspondents scattered all over the country, no one is better able to feel the pulse of the public than ourselves, and that enables us to testify to the rapid development of sound and healthy ideas during the past season, all pointing to a desire for vessels of moderate tonnage, combining safety and cruising qualities of the first order. For this reason alone, if for no other, we deem the year now closing as one having added a greater store of wholesome experience in the sailor's art than any of its predecessors. We will publish our usual records for the year at an early day and from them draw definite comparisons by figures, which will refute the efforts of some who dory the sport because we have been happily

spread the vulgar newspaper sensations of former years and who judge the entire community by the two or three races given by the leading metropolitan clubs. Nor need four or five out of the half dozen steam yachts built swamping the sailing interests altogether, as supposed in some quarters. The additions made to the steam fleet are simply so many indications of the increasing wealth of the nation, and their construction always will go hand in hand with the spread of the sea sport. It is erroneous to assume that none but addle-pated individuals, with time hanging heavily upon their hands, can see any delight in cruising in steamers.

There is quite as much skill, experience, watchfulness and care to be expended in navigating a steamer from port to port as there is in handling a vessel under sail. There is quite as much room for the acquisition of health and familiarity with all the ways of men and things afloat on the bridge of a masted yacht as there is in the cockpit of the clipper schooner. There is the same need for the keenness of the eye and the quickness of the hand that there is in the science of modeling and sparring on the deck. If aboard the steamer, you turn over all the cares and duties of her navigation and maintenance to a hired captain; so, too, may you have your professional man at the wheel of the sailing craft, and soothe your mind with cocktails and the late novels on the transoms of a vessel under sail. But if you are a man anxious of acquiring equal rank in point of knowledge with your professionals—if you propose, in short, to be captain of your own ship, there is as great, if not greater, opportunity with your hand at the tiller than with your hand at the helm of a steam vessel. The writers of the press who will bewail the taste for yachting under steam, because "they do not race," and their names and doings do not contribute enough for the knights of the pen to pad their columns with, are not only wrong, but good reason why they should be. The steam yacht is a good reason why the sailing steamer never will drive out the sailing craft; she costs too much to build and she costs too much to run. Only a very small fraction of the fraternity can indulge in the thrilling sensation of driving along at a high rate of speed in command of a sea-going steamer, and even that will be to go along with cocktails and the late novels on the transoms of a vessel under sail. 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25 arrows at 80 yards.....	13.52	12.10	14.62	21.77
45 arrows at 80 yards.....	13.52	12.10	14.62	21.77
24 arrows at 60 yards.....	12.82	13.52	14.54	16.75
Average York round.....	12.82	13.52	14.54	16.75
Average 100 yards.....	12.82	13.52	14.54	16.75
Average 80 yards.....	12.82	13.52	14.54	16.75
Average 60 yards.....	12.82	13.52	14.54	16.75
P. O. Hyatt, Cortland, N. Y.				
York Rounds.				
August 3.....	100 yds.	80 yds.	60 yds.	Total.
" 4.....	100 yds.	80 yds.	60 yds.	Total.
" 16.....	100 yds.	80 yds.	60 yds.	Total.
" 21.....	100 yds.	80 yds.	60 yds.	Total.
" 25.....	100 yds.	80 yds.	60 yds.	Total.
" 29.....	100 yds.	80 yds.	60 yds.	Total.
" 31.....	100 yds.	80 yds.	60 yds.	Total.
" 31.....	100 yds.	80 yds.	60 yds.	Total.
21 arrows at 80 yards.....	17.01	20.10	22.10	59.21
Average York round.....	17.01	20.10	22.10	59.21
Average 100 yards.....	17.01	20.10	22.10	59.21
Average 80 yards.....	17.01	20.10	22.10	59.21
Average 60 yards.....	17.01	20.10	22.10	59.21
W. Holberton, Hackensack, N. J.				
York Rounds.				
August 14.....	100 yds.	80 yds.	60 yds.	Total.
" 20.....	100 yds.	80 yds.	60 yds.	Total.
45 arrows at 80 yards.....	12.42	10.61	10.61	33.64
21 arrows at 80 yards.....	17.54	15.53	16.80	50.87
Average York round.....	17.54	15.53	16.80	50.87
Average 100 yards.....	17.54	15.53	16.80	50.87
Average 80 yards.....	17.54	15.53	16.80	50.87
Average 60 yards.....	17.54	15.53	16.80	50.87
Edward P. Bartlett, Marietta, Ohio.				
York Rounds.				
August 4.....	100 yds.	80 yds.	60 yds.	Total.
21 arrows at 80 yards.....	14.72	11.35	13.53	40.58
Average York round.....	14.72	11.35	13.53	40.58
Average 100 yards.....	14.72	11.35	13.53	40.58
Average 80 yards.....	14.72	11.35	13.53	40.58
Average 60 yards.....	14.72	11.35	13.53	40.58
M. D. Ewell, South Evanson, Ill.				
York Rounds.				
August 2.....	100 yds.	80 yds.	60 yds.	Total.
" 20.....	100 yds.	80 yds.	60 yds.	Total.
21 arrows at 80 yards.....	14.50	12.58	12.46	40.54
Average York round.....	14.50	12.58	12.46	40.54
Average 100 yards.....	14.50	12.58	12.46	40.54
Average 80 yards.....	14.50	12.58	12.46	40.54
Average 60 yards.....	14.50	12.58	12.46	40.54
Howard Fry, Williamsport, Penn.				
York Rounds.				
August 15.....	100 yds.	80 yds.	60 yds.	Total.
" 21.....	100 yds.	80 yds.	60 yds.	Total.
21 arrows at 80 yards.....	14.50	12.58	12.46	40.54
Average York round.....	14.50	12.58	12.46	40.54
Average 100 yards.....	14.50	12.58	12.46	40.54
Average 80 yards.....	14.50	12.58	12.46	40.54
Average 60 yards.....	14.50	12.58	12.46	40.54
WILLIAM H. THOMPSON, Sec'y. I. P. C.				

HIGHLAND PARK, Ill., Oct. 6.—The third match of 96 arrows at 60 yards, between the Washburn Merry Bowmen and the Highland Park Archers, resulted in a victory for the latter club by 13-8, as seen by the following scores:				
Highland Park Archers.				
Dr. Weston.....	23-21	21-29	22-26	23-110
Mr. Swartwout.....	21-113	20-88	31-103	72-311
Mr. Taylor.....	22-113	20-88	31-103	72-311
Mr. Hammond.....	22-113	20-88	31-103	72-311
Mr. Hall.....	22-113	20-88	31-103	72-311
Washburn Merry Bowmen.				
Will H. Thompson.....	23-131	23-131	24-122	70-384
Maurice Thompson.....	23-119	23-129	24-136	70-384
S. R. Koss.....	23-119	23-129	24-136	70-384
Mr. McMechan.....	17-65	23-88	26-88	66-241
Mr. Klein.....	17-65	23-88	26-88	66-241
Grand Total, 465-2,021.				
Highland Park Archers won two of the three matches, and the Washburn Merry Bowmen one, as follows:				
Highland Park Archers won first match by.....				
Washburn Merry Bowmen won second match by.....				
Highland Park Archers won third match by.....				
Oct. 19.—Below we give the scores of the second match, 96 arrows at 60 yards, between the Oakland Bow Club, of California, and the Highland Park Archers:				
Oakland Bow Club.				
Dr. Weston.....	23-21	21-29	22-26	23-110
Mr. Swartwout.....	21-113	20-88	31-103	72-311
Mr. Taylor.....	22-113	20-88	31-103	72-311
Mr. Hammond.....	22-113	20-88	31-103	72-311
Mr. Hall.....	22-113	20-88	31-103	72-311
Grand Total, 465-2,021.				

Oakland Bow Club.				
F. C. Havens.....	22-113	20-82	19-77	23-115
Mr. Cook.....	22-113	20-82	21-80	19-89
A. W. Havens.....	14-50	10-50	15-76	20-116
Mr. Cobb.....	12-45	18-92	14-76	16-84
Grand Total, 239-1,403.				
Highland Park Archers won by 50-45.				
HIGHLAND PARK, Ill., Oct. 21.—The gentlemen of the Highland Park Archers shot for the society's champion medal this afternoon. The winner, Mr. Taylor, commenced the use of the long bow only last July. The following scores gave Mr. Taylor 4½ points, Dr. Weston 2 and Mr. Swartwout 1½ points:				
	80 yds.	60 yds.	Total.	
H. S. Taylor.....	175-157	49 9 1	180-155	
E. B. Weston.....	131-127	22 11 4		
N. E. Swartwout.....	126-100	28 7 0	100 110	
N. E. Swartwout.....	124-84	21 12 1		
P. F. Hall.....	145-101	21-101	91-84	
P. F. Hall.....	125-100	17 55 1	69-82	
	(18 34	11 47)		
PROSPECT PARK, Brooklyn, Oct. 13.—Match between ladies and gentlemen of the Brooklyn Archery Club and the Toxophilite of Newark, N. J. Columbia and American round:				
Ladies' Columbia Round.				
	50 yds.	40 yds.	30 yds.	H. S.
Mrs. A. H. Gibbs.....	17-47	21-108	23-123	61-278
Mrs. Palmer.....	17-47	21-108	23-123	61-278
Mrs. Spencer.....	17-47	21-108	23-123	61-278
Mrs. Miller.....	17-47	21-108	23-123	61-278
Gentlemen's American Round.				
J. E. Hurd.....	20-104	20-82	24-154	68-340
Theo. Baldwin.....	12-50	24-114	20-128	60-302
T. A. Hines.....	15-73	23-71	21-111	59-255
A. H. Gibbs.....	12-50	24-114	20-128	60-302
Grand totals: Ladies, 275-927; gentlemen, 246-1,044-2,591.				
BROOKLYN CLUB.				
Ladies' Columbia Round.				
	40 yds.	30 yds.	20 yds.	H. S.
Miss Horsman.....	4-16	13-63	14-48	31-117
Mrs. Nash.....	4-16	13-63	14-48	31-117
Mrs. Scudder.....	5-20	13-45	9-44	25-125
Mrs. Woodland.....	5-23	9-25	20-24	29-103
Gentlemen's American Round.				
Mr. Nash.....	21-79	23-109	23-113	69-301
Mr. Penhall.....	16-84	22-119	23-116	61-319
Major Constable.....	15-73	23-71	21-111	59-255
Mr. Penhall.....	16-79	22-125	25-104	74-309
Grand totals: Ladies, 124-519; gentlemen, 209-1,252-3,571.				
SARATOGA SPRINGS—A. Y., Oct. 24.—The following match at the York Round was shot Oct. 19, between Will H. Thompson, of Crawfordville, Ind., and Frank H. Walworth, of Saratoga Springs, N. Y. Mr. Walworth being allowed to add to his score the excess of his 80-yard score over his 100-yard score. Mr. Thompson's score at 100 yards surpasses any we have seen made by any other archer in the country:				
	100 yds.	80 yds.	60 yds.	Total.
Will H. Thompson.....	46-220	34-144	25-109	105-473
Frank H. Walworth.....	36-138	26-162	30-80	92-380
Add excess at 80 yds..... 64				
Mr. Thompson won by 69 points.				
—For close confinement, sedentary habits and brain and nervous-tire, trust in Hop Bitters.				
WILLIAMSBURG ATHLETIC CLUB.—The annual fall games were contested Saturday, Oct. 23. The weather was rather unpropitious, it being bleak and very windy, which interfered with fast times that otherwise would, no doubt, have been made, as the track was in fine condition, owing to the efforts of Mr. McDasters, the club trainer.				
In the 100-yard run H. M. Johnson, of the Lafayette A. C., was the winner in 10½ sec. from 4 yards; A. C. Cooper, N. Y. A. C., second, from 5 yards.				
The 220-yard run was won by Walter A. Smith, W. A. C., in 24½ sec. from 17 yards; L. H. Wales second.				
The 220-yard hurdle race was won by H. M. Stone, Pastime A. C., in 29½ sec.; J. B. Hanna, S. A. C., second.				
W. H. Parry, W. A. C., won the one-mile walk in 7 min. 18½ sec.; G. H. Hanon, American A. C., second.				
The 600-yard run was won by G. J. Bradish in 1 min. 18½ sec.; C. A. White, S. L. A. C., second.				
The most exciting event was the 1,000-yard run, special handicap. L. E. Meyers, M. A. C., was the winner by the margin of about two inches from J. Saunders, W. A. C., 50 yards handicap. Meyers was not up to his usual form, and had a struggle to win.				
The final tug of war was won by the Union A. C., from the Orion R. & A. C. by 3 inches.				
HARVARD vs. COLUMBIA.—The return of this inter-collegiate match was played at Hoboken, Oct. 18, and resulted in the New Yorkers' defeat by one innings and twenty-seven runs.				

Answers to Correspondents.

See No Notice taken of Anonymous Communications.

A. H., Painesville, Ohio.—The armory is at New Haven, but manufacture has been suspended. Will resume at an early date, and due notice will be given in our advertising columns.

D. P. S., Glen's Falls.—Your dog has a bad attack of mange. Avoid giving any meat, and feed upon cooling diet. The disease is contagious, and you should at once quarantine him. Give him, twice a day, five drops of Fowler's solution of arsenic in his food. Keep his kennel clean, and change his bedding constantly. Once a week give an aperient of Epsom salts, and a teaspoonful of sulphur and magnesia in food three times a week. Rub the parts affected twice a day with Glover's mange cure, and write results.

J. W. E., Pottsville, Pa.—Your dog is troubled with constipation. Feed boiled liver, twice a week or oftener. Give plenty of exercise, and at regular times. Costiveness is frequently the result of inflammation of the bowels or liver. In addition to usual food, give boiled green vegetables. If the trouble has become chronic, give a pill of rhubarb and ipecacuanha—five grains or more of the former, with a half grain of the latter—at the time of feeding every day.

MASSACHUSETTS—Worcester, Oct. 23.—This week there has been somewhat of a let-up in sporting news in this vicinity. The local sportsmen have many of them had the pleasure of taking Mr. T. C. Banks, Business Manager of the FOREST AND STREAM, by the hand and renewing old acquaintance. During the week there have been two trials of skill in this vicinity. One of the local clubs had what they called "President's Day." Mr. C. B. Holden broke 88 out of 40 balls; Mr. George McJannet, 47 out of 50; A. L. Gilman, 44 in 16; and M. D. Gilman, 21 in 23 balls.

H. A. M., Hammond, N. Y.—I. My Gordon setter has a very small white stripe on her breast, and for that reason she is said to be of impure breed. Does it necessarily follow that if a so-called sportsman have any white in his coat, it is of impure blood? Ans. 1. "Stonelenge" says: "It is admitted that the original Gordons were often black, tan and white; but as in all our shows the classes are limited to black-tan, the long arguments which have been adduced on that score are now obsolete. A little white on the chest and a white toe or two are not objected to, but a decided frill is considered by most judges to be a blemish." 2. Certainly not.

D. T. L., Yorkers.—My dog has been lame in one foreleg for some time, and now for a week past has been afflicted in the same way in all of his legs. When I take hold of his limbs to work the joints, he howls and whines piteously. Ans. Your dog has the rheumatism. Keep him warm and dry. Feed on plain food. Rub the parts afflicted with a good stimulating liniment, such as is used for horses. Administer internally bi-carbonate of soda (baking soda) dissolved in a little water, three times a day. As you neglect to state breed, age or size of dog, we are unable to state exact quantity, but to a fifty-pound dog about one-half teaspoonful is the thing. You can gauge dose accordingly.

—One of the firm of John H. Pray, Sons & Co., wholesale and retail carpet dealers, Boston, Mass., is, or claims to be, a sportsman, and he will at all times take great pleasure in doing a favor for a fellow sportsman in want of any kind or grade of carpeting, rugs, etc., etc. Correspond with the house, or call and see him, and see if he means what he says.—Adc.

Many replies have been unnecessarily crowded out, and have been sent by letter.

—For sinking spells, fits, dizziness, palpitation and low spirits, rely on Hop Bitters.

PUBLISHER'S DEPARTMENT.

THE PLEASURES OF HOPE.—When the body is bowed down with pain an intense longing for relief brings hope. This may brighten the suffering, but it does not cure. At such a time as this, how welcome is such a friend as Warner's Safe Kidney and Liver Cure, bringing home health and happiness and the joys of a renewed life.—Adc.

—See kennel advertisement of H. B. Vondersmith.

—Mange-line cures, or no pay. Trial box mailed for stamp Hepworth, Druggist, 236 Madison street, Brooklyn.

—The Holabird Shooting and Fishing Supplies, Uphregrave & McLellan, sole manufacturers, Valparaiso, Ind. Send for circular.

—Oh, why will you let that invalid friend suffer that Hop Bitters will so certainly cure.

NEW YORK PRESS CLUB.—The regular fall meeting of the New York Press Club will take place on Monday, November 15, that date being the eighty-third anniversary of Mr. Thurlow Weed's birthday.

Forest and Stream

—AND—

ROD AND GUN.

At the single subscription price of \$4 a year, A TWENTY-FOUR PAGE WEEKLY JOURNAL, catering to the tastes and devoted to the interests of GENTLEMEN SPORTSMEN and their families. Its many Departments treat of Natural History, Shooting, Yachting, Fish Culture, The Kennel, Archery, Fishing, The Rifle, Cricket, and all gentlemanly out-door sports. It is without a rival.

FOREST AND STREAM PUBLISHING CO., NEW YORK CITY, NEW YORK.

MacIntosh Waterproof Goods.

In ordering Stock or Pants please state the Size—you can easily obtain it from your Shoemaker—the Boot or Shoe you are accustomed to wear.

The quality of these goods is so well and widely known as to require no comment. It is not only unequalled, but also unapproached by that of any similar manufacture in the world. By a special arrangement with the Messrs. MacIntosh, we are enabled to place their goods in the hands of Sportsmen at prices which will certainly drive all inferior makes out of the market.

Stockings, full length, any sized foot, per pair, - - - - - \$8 00
Pants, reaching nearly to the arm-pit, - - - - - 14 00
Heavy flax ground sheets, weight 6 1-2 lbs.; size 7 1-2x4 1-2 ft., each, - - - - - 8 00

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BARGAINS! BARGAINS!! BARGAINS!!!

IN FINE BREECH-LOADERS.

PURDEY, REILEY, WESTLEY RICHARDS, SCOTT, WILLIAMS & POWELL and NICHOLS & LEFEVER,

ALL AT A GREAT REDUCTION.

5 Purdey's in Case Complete, 6 Scott "Premiers" in Case Complete, 5 Scott with Compensating Lump, 2 E. M. REILEY'S High Quality, 4 Westley Richards' High Quality, 3 Williams & Powell High Quality, 4 Nichols & Lefever C. and D. Quality.

Also a Lot of Medium Grade Greener Side-Action Light Guns, 14 and 12-Bore, at \$50 each; former price, \$85. The reduction in price in these guns ranges from 30 to 50 per cent. SEND FOR DESCRIPTION.

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Hotels and Routes for Sportsmen.

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The Route of the Sportsman and Angler to the Best Hunting and Fishing Grounds of Virginia and West Virginia,

Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, snipe, woodcock, mountain trout, bass, pike, pickerel, etc. Guns, fishing tackle, and one dog for each sportsman carried free.

The Route of the Tourist, through the most beautiful and picturesque scenery of the Virginia Mountains to their most famous watering places and summer resorts.

The Only Route via White Sulphur Springs.

Railroad connections at Cincinnati, with the West, Northwest and Southwest; at Gordonsville with the North and Northeast; and at Richmond and Charlottesville with the South. All modern improvements in equipment.

CONWAY R. HOWARD, Gen. Passenger and Ticket Agent, Richmond.

Bromfield House, Boston.



EUROPEAN PLAN.

MESSINGER, Proprietor.

To Hunting and Fishing Parties.

The Pullman Car Company

IS PREPARED TO CHARTER THE new cars "Davy Crockett" and "Isaac Walton," which are fitted up with dining room and kitchen, sleeping apartments, lavatories, etc., also provided with racks and closets for guns and fishing tackle, and kennels for dogs. Diagrams, rates and other desired information furnished on application to Gen'l Supt. P. P. C. Co., Chicago. J28 5000.

Guns, Ammunition, Etc.



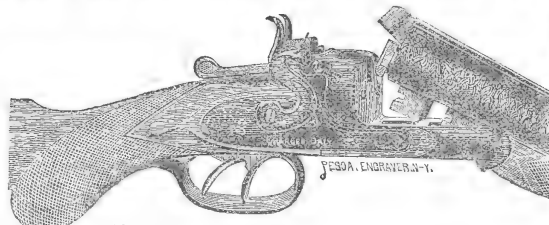
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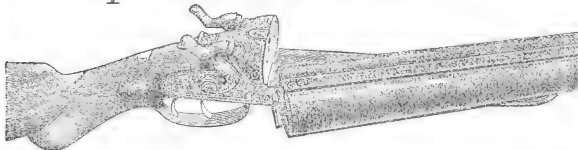


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Simplest, Most Efficient, Indestructible. Adopted by the U. S. Government in the Navy and Frontier Service. 10 Shots, .45 Cal. 70 Grain Standard Government Cartridges. Prices: Carbines, \$22 Frontier Rifles, \$22; Sporting and Hunting Rifles, \$25. Discount to the Trade Only. Send for Catalogue and Price-Lists. E. REMINGTON & SONS, 283 Broadway, N. Y.

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Special Announcement.



THE MANUFACTURERS OF THE "FOX" GUN, FEELING THAT DEALERS, as a general thing, have not done justice to the merits of this WONDERFUL GUN, are determined to have them placed before sportsmen more generally, that their great merits may become better known and appreciated. It is needless to speak of THE ELEGANT WORKMANSHIP AND WONDERFUL SIGHTING POWERS of these guns. It is a fact well established that they are UNSURPASSED BY ANY IN THE WORLD.

We propose for a limited period to offer a line of these guns at the following EXTREMELY LOW PRICES, after which the original prices will be restored, our object being to introduce the guns into sections of the country where dealers have failed to present them; in the firm belief that where they become known they will be the established favorite, and we shall reap the benefit in future of this great sacrifice.

Such Inducements Have Never Before Been Offered.

Sportsmen wishing to purchase one of these beautiful guns must respond at once, as the number offered at these prices is limited.

	FORMER PRICE.	NOW.
Twist Barrels, 12 or 10 Gauge, Pistol Grip, Reb. Locks,	\$58 & \$63.	\$40.
Lam'd Steel " " " " " " " " " "	68 & 73.	45.
Hamascus " " " " " " " " " "	78 & 83.	50.
Sup'r " " " " " " " " " "	100.	60.
Fin "or Bernard" " " " " " " " " " "	125.	75.
Extra " " " " " " " " " "	150.	90.
Finest " " " " " " " " " "	200.	110.

Every Gun warranted. Sent C. O. D., with privilege of examination. Send for descriptive catalogue.

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CORDUROY SHOOTING SUIT, A SPECIALTY.

FROM GOODS OF MY OWN IMPORTATION—DEAD GRASS COLOR.—ALSO, ALL-WOOL WINDSOR CORD, VELVETEEN, FUSTIAN CANVAS—all prices. Send for Price-List and Samples. Address

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The Daly Gun,

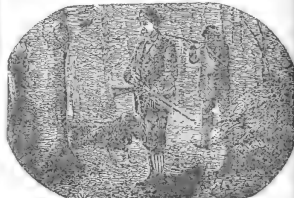
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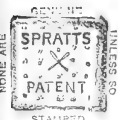
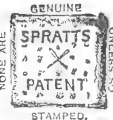
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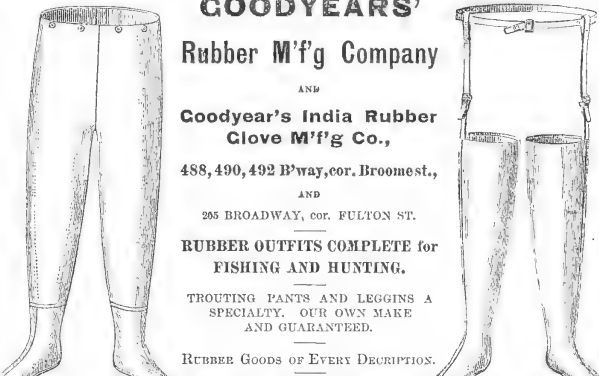
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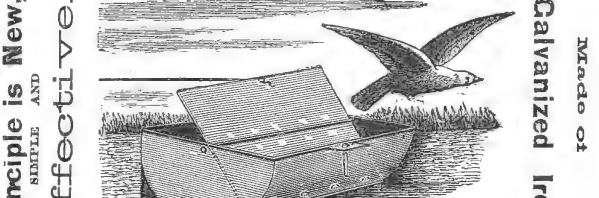
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Principle is New,
Simple and
Effective.



Made of
Calvanized
Iron.

THIS TRAP IS PLACED IN THE GROUND, the top level with the surface. When the bird is pulled one-half of the lid revolves within the Trap and DRIVES THE BIRD INTO THE AIR. Sportsmen will at once appreciate the advantages. Price \$1.

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Birds' Eggs and Birds' Skins in Great Varieties.
Varieties in all his branches.
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Cleans by scraping (without water), is self-
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Genuine First Quality Blue
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FOR BREACH-LOADING GUNS.

THE BEST PAPER SHELLS IN THE MARKET.
We have a lot of No. 12 gauge which we will sell
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Will be sent to any address on receipt of the money.
This is a rare chance to get a first-class article
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CHALMERS & MURRAY, 16 Reade St., New York.

\$5 to \$20 per day at home. Samples
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Manufacturers of Fine Fishing Tackle of
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ENAMEL SPLIT BAMBOO RODS received the
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With Improved
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The Universal Lamp,
For Sportmen and Others, Combines
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EXCELSIOR DASH LAMP can be used
right or left hand on any kind of dash. Un-
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Send stamp for Illustrated Catalogue.

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Lyman's patent combination Gun Sight is
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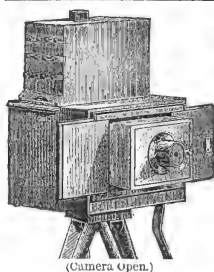
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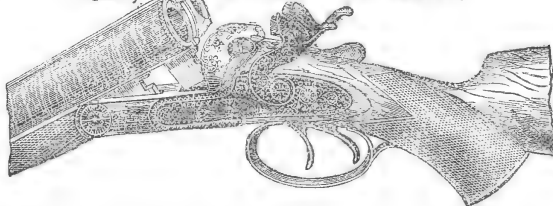
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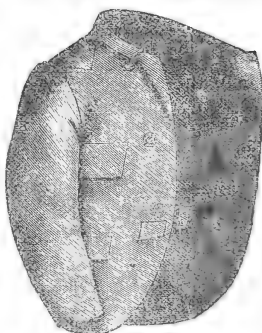
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NEW YORK, THURSDAY, NOVEMBER 4, 1880.

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[Nos. 39 and 40 Park Row, New York.]

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THE WICKERSHEIMER PRESERVING FLUID.

A FEW weeks ago, in an answer to a correspondent, we referred to the "Wickersheimer process," and it has brought us a flood of letters which we have delayed answering until we could get the formula for its preparation and so not only give our readers valuable information concerning the preparation of fish and other animals for natural history purposes, but also how to make the fluid to do with. We first became acquainted with this method at the International Fishery Exhibition in Berlin this last summer, where in the display of Prof. Jean Wickersheimer, Conservator of the University of Berlin, we saw many animals lying on the tables, without even a glass over them, which were said to have been kept for three years. Among these were serpents of fifteen to twenty feet in length; birds, fishes, seals and crustaceans. Skeletons also were shown which were kept together by the natural ligaments and were perfectly flexible, among them a snake and a crane—perfectly charming specimens—bearing even the rude handling of the ordinary exhibition visitor and exhibiting every motion which the animals were capable of in life. Vegetable tissues were also preserved, and great sea weeds hung around looking as if newly gathered.

We naturally wanted to see how the fluid was used, and by invitation of Prof. Wickersheimer we saw some fishes injected. A fountain syringe was used, made of a tin can holding a quart, which hung on a nail about six feet high; a rubber pipe led from this, in the end of which was an injecting needle about four inches long. Laying a fish upon its back the Professor inserted the needle in its breast until it reached the heart, and let the fluid run until all the veins were filled. "But," said we, "how are you certain that it exactly strikes the heart?" "If it does not, then the fish will puff up about the gills and you try it again," answered the operator: "but if it is all right, then in a few minutes you will notice the pectoral fins begin to expand and stand out. If the fish is fresh the dorsal and other fins will also expand." The fish operated upon would weigh about six pounds, and as soon as the fins were expanded he threw it into a tub of the liquid, where it was allowed to remain for two or three days and was then ready to be placed on exhibition. The Professor explained that in the case of those large serpents, seals, etc., he injected them in all the large arteries which were accessible, as well as in the heart; but that for crabs, lobsters, spiders, starfishes and such small deer it was only necessary to keep them immersed for a few days. Collectors of insects will readily appreciate a method which leaves the legs flexible and not liable to break.

The colors in the serpents were well preserved. The fish faded somewhat, and their eyes sank as much as fish in market do when kept too long; but they were well preserved, and fish are the worst things which the taxidermist has to deal with, while the collector is agast at the bills for jars and alcohol. After we left Berlin the newspapers chronicled the fact that Professor Wickersheimer embalmed a boy and exhibited the body in the open air for several months, during which time it "looked like a sleeping child, preserving its softness and life-like appearance;" while we saw the lungs of a turtle in a jar which could be inflated by a pipe through the cork to several times their size. At this time we knew that the Prussian Government had bought the formula, but did not know that it had been published by the Department of Instruction in the *Staatsanzeiger*, the official organ of the Department. Learning this we sent for a copy, and now take pleasure in laying before our readers the following translation:

FORMULA OF THE WICKERSHEIMER FLUID.

"In 3,000 grammes of boiling water dissolve alum, 100 grammes; common salt, 25 do.; saltpetre, 12 do.; potash, 60 do.; arsenious acid, 10 do. After cooling and filtering the above solution add to every ten litres of it four litres of glycerine and one litre of methyl alcohol."

The directions given in the paper alluded to are as follows: "The mode of application varies with the nature of the bodies requiring to be preserved. Anatomical preparations, entire bodies, etc., which are to be preserved dry, are laid in the fluid from six to twelve days, according to their size, and are then taken out and dried in the open air. The ligaments and muscles will now remain flexible and soft, so that all natural movements can be executed. Hollow organs, lungs, intestines, etc., must be filled with the fluid and then laid in it;

afterward they are taken out and dried, first being distended with air. Smaller animals, such as crabs, beetles, lizards, frogs, etc., are not to be dried, but put up in bottles of the fluid, if the natural colors are to be kept unchanged.

"If human or other large bodies are to be preserved for a longer period before they are used for scientific purposes it is sufficient to inject them with the fluid. Two litres, f. l., will suffice for a child of two years; about five litres are required for an adult. By this treatment the muscles will appear as if fresh, when sections are made, even after years. When thus injected if human bodies are preserved in the open air they will gradually lose their fresh appearance and the skin will become brown. This can be avoided if the fluid is rubbed into the skin and if the access of air is prevented as far as possible.

"This latter treatment is recommended for bodies which are to be exhibited or to be preserved for some time before burial, for the features will remain unchanged and there will be no smell.

"For real embalming a method combining injection and immersion is to be applied. The bodies after injection are wrapped in cloths which are saturated with the solution and are then kept in tight cases."

THE RHODE ISLAND FISH COMMISSION.

THE ninth annual report of the Rhode Island Fish Commission, made to the General Assembly at its January Session, is just at hand. The sea-fisheries of this State are of great importance, so far overtopping the fresh water interests that the Commissioners look more towards means of preserving the former than increasing the latter and call the attention of the law-makers to the fact that their law requiring all taking of fish by traps, weirs, and similar contrivances, to be suspended from Saturday morning at sunrise to the same hour on Monday, from May to August, is not enforced. The Commissioners have done all in their power to call public attention to the law by publishing it once a week in the principal newspapers and appointing deputies who shall have supervision of certain parts of the bay shores included in the act.

In order to render their report perfectly clear it is accompanied by a map showing the traps at Seacomet in the spring of 1879, and another exhibiting the heart-nets or pounds set in Narragansett Bay during the same summer, together with the depths of water in which they are placed. The law was found to be more generally observed after this, only one instance of its violation being reported. The difficulties of enforcing the law were very great, as during a run of scup (the "porgy" of New York), *Stenotomus argyrops*, the traps are overhauled every two hours, night and day, and when the weather is rough it is impossible to tell what is going on about a trap unless a boat is anchored beside it; and when no fish are running the fishermen are very law abiding, but frankly say that in the event of a run of fish on close days they would run the risk of prosecution. The Commissioners decline to argue the question as to the spring trapping interfering with the hook and line fishing in Narragansett Bay as after all that has been written on the subject they seem no nearer a solution of it than twenty years ago. "The argument," say they, "has been a bitter one, and neither side has been at all disposed to listen to reason. The trappers have fought a hard fight with a bold front, and have never failed to appear when called upon to assert their position, backing it up year after year with the same arguments by the same parties. One wiseacre asserts that the pollution of the water from the sewage of the City of Providence has ruined the bay fisheries; an opponent takes the floor and proves exactly the contrary."

*** "A glance at the map shows that the traps are so set as to take the fish as they go out and not as they come in, and this year the most southern and eastward one at West Island took more than any other, showing that the fish so taken were bound still farther East. In proof of this, it is a fact that the trappers at Buzzard's Bay have found that their business has come to an end since trap fishing has become systematized and carried on so large a scale at Seacomet."

In referring to the old saying that the fishes of the sea can never be exhausted they very truly say that this maxim is applicable only to those species which remain at sea, while others which are obliged to seek the vicinity of the shore to

FOREST AND STREAM.

NEW YORK, THURSDAY, NOVEMBER 4, 1880.

* * * The FOREST AND STREAM goes to press Wednesdays. Correspondents are requested to mail their communications so that they may reach us before that day.

A BROADENED FIELD.—Although the cricket department of the FOREST AND STREAM has from its inception been accorded a very substantial support by the devotees of that game, we are compelled, by reason of the other demands upon us, to discontinue the department. The space thereby gained will be devoted to our specialties—fishing, shooting and the kennel; and we shall give our undivided attention to these branches of American field sports. Our game columns each week are now filled with a rich abundance of matter, which indicates either an unusually large host of sportsmen are in the field this fall, or, perhaps, that the FOREST AND STREAM has been more successful than ever before in eliciting from its hosts of friends their experience in the pursuit of game.

By narrowing our field we have broadened it, and we shall strive now to make the paper more than ever before a repository of all good things pertaining to the gun, rod and kennel.

OPENING OF THE QUAIL SEASON.—The season for quail in this State opened on Monday the 1st instant. This date is certainly none too late, and in the opinion of many sportsmen it is too early. We shot last week in Connecticut, and found that several of the heaves moved were not yet full grown. We have sometimes seen in November little quail just hatched, but of course in such cases the nests had been broken up so that the second brood was exceptionally late.

We think the opinions of the oldest sportsmen, those who have the widest experience, would agree that the birds should never be shot before this time. The law in Pennsylvania is defective and so is that of Connecticut in permitting quail to be shot too early. Still it must be said that few men, we hope, trouble the half-grown heaves. The sportsmen have too much self-respect to meddle with these broods, and as the marketmen will not buy the little things, the pot hunters have no inducement to kill them.

spawn should have some mercy shown them, "or our children's children (if we are so fortunate as to have any) will have no fish." They treat the pound-net question very fairly, recognizing the fact that it has been a business pursued for twenty years or more, and its sudden stoppage would work injustice to those having their means invested in it, adding: "We are, all of us—legislators, commissioners, fishermen and arguers, *pro* and *con*—unfortunately very ignorant of what goes on under water; it is an element that offers many difficulties to the student, and we must then submit to learn what we do of nature's work slowly if we would learn surely, and avoid jumping at conclusions," and Prof. Baird is quoted as holding the same views. A license of fifty dollars, or such sum as the Legislature deems fit, is proposed for all pound-nets or for each captain of a trapping gang who is to make return under oath to the commissioners as to the catch during the season, prices, etc., any evasion of which is to be punished by fine or imprisonment.

In their report on the inland fisheries they mention that black bass have multiplied throughout the State and are now comparatively abundant where they were unknown ten years ago. They speak favorably of the carp and request those having suitable waters to make application for them which will be considered when they receive the promised lot from the National carp ponds at Washington.

—We understand that Mr. J. W. Bouton, 706 Broadway, New York, is receiving subscriptions for the reprint of Dame Juliana Berners' "Treatyse of Fysshynge." The publisher's announcement tells us that the extreme rarity of this work and the great interest taken in it by connoisseurs has suggested a *fuscinale* reprint for the use of those collectors and anglers who can never hope to possess the almost priceless original. The "Treatyse of Fysshynge" by Dame Juliana Berners, was first printed by Wynkyn de Worde in the second edition of the "Book of St. Alban's" in 1496. Some ten or more editions of the work are known to have been issued between the date of its first publication and the year 1660, showing the comparative popularity of the work in the early days of printing. All these possess more or less value from their varying features and degrees of rarity, and are eagerly sought after by collectors. The present *fuscinale* is reproduced from a copy of the original edition in the British Museum, by means of photography, and consequently renders every peculiarity of the original in faithful detail; the rude illustrations which adorned the first edition of this "Ityll plannett" are here given in all their quaint roughness. The print is printed on hand-made paper of the same texture and color as that on which the first edition appeared, and the binding is of contemporary pattern and material, so that the reader of to-day in handling this volume can realize the form and appearance of the original, which must have delighted the eyes of those who studied "treatyses pertheyngye to dyspers playsaunt matters belongynge vnto noblesse." The subscription price of the *fuscinale* reprint will be \$5.

THE PENNSYLVANIA FIELD TRIALS.—In stormy weather the inaugural meeting of the Pennsylvania Field Trials Association began and in dismal weather it ended. Four days had been allotted for the running off of the stakes, but on account of the scarcity of birds, the change of location and the steady downpour of rain during most of the time, only seven heats in the first stakes—the All-ages—were run off, and all the prize money was pooled and divided.

The meeting, for an inaugural one, was well attended. Pittsburgh was largely represented, but we were surprised to see, in the list of forty-three entries, but one name from Philadelphia. It seems to us that these trials were run somewhat too early to give stay-at-home people an equal chance with men who may choose to send their dogs to the West for work at the opening of the season there. Would it not be better to have succeeding meetings fixed for a date at least a month after the opening of the season in Pennsylvania? In such a case dogs, whose owners for any reason cannot send them out of the State, would have an opportunity to have a fair amount of work on local birds given them before the trials are run.

A very full account of the meeting will be found in our kennel columns this week, where also all remarks on the events of the meeting appear.

BATTERY SHOOTING.—Duck and goose shooting from batteries and from bush houses, or blinds of any description, built away from the shore, should be everywhere forbidden. There is no method of shooting that has so great a tendency to drive fowl away from any locality as one which disturbs them on their feeding-grounds. No matter how much the birds are shot at on the open water or while flying across points they will still continue to frequent a locality where they are allowed to feed in peace. As soon, however, as gunners begin to disturb them while on their feeding-grounds the suspicions of the birds are aroused at once and they become very wild. They dare not alight with other ducks, for they have learned by sad experience what decoys are, and every bunch of birds on the water is shunned. Persecution of this kind cannot fail to result in driving the birds away to other grounds where they will be free from attacks of this kind.

Batteries and bush houses are nearly always placed on the feeding-grounds, and their use should therefore be forbidden. Sailing for ducks also tends to harass and drive away the

birds, and should nowhere be permitted. The law for Long Island on these points should be the same for all parts of the State.

FISHWAYS AND FISH LAWS.—The construction of fishways is an essential point in the protection and propagation of fish and with proper passes at Troy, Glen Falls and Cohoes there is no doubt but that the Hudson and its great tributary, the Mohawk, could be made salmon streams, while it is apparent to every thoughtful man that many trout streams have mill dams which have cut off the fish from their spawning beds. If it is necessary for the sake of the waterpower to dam a stream it should be made obligatory upon those who derive pecuniary benefit therefrom to erect a fishway in order that the rights of the people to an unobstructed passage of fish to and from their breeding grounds is not interfered with, and it needs not only the assistance of Fish Commissioners and the laws referred to, but every friend that can be interested, to fight for the enforcement of the fishway law which is now ignored by dam owners. The black bass spawn in June in many waters, and the close season prescribed by the New York law should be extended to at least July. Dyestuffs, sawdust and coal tar should be taken care of by those who handle or make them, and it is unjust to exempt any streams from the provisions of the law regulating the emptying of deleterious refuse in our streams. We hold that no individual or corporation should have the right to deprive the people living upon or near a stream of their right in the fish in it, which is older than any law authorizing the building of dams or the erection of mills.

STRIPED BASS.—This fish has been very scarce in the vicinity of New York throughout the season, and anglers have bewailed its supposed disappearance; but the past ten days the professional fishermen along the Massachusetts coast have been taking the large ones quite freely, and on Tuesday, the 26th inst., Mr. Blackford received the first lot of large fish, and his stand was piled with them. They were hung around, making a beautiful show. They ran from thirty to sixty pounds, averaging forty-five, and were selling at sixteen cents per pound, while the smaller ones, from two to ten pounds, brought twenty cents. As they have probably come to stay, there will be a great decline in these prices by the end of this week. Anglers may now look for good fishing in the East River and up Long Island Sound.

THE SALMON MYTH.—In all lands where the salmon is found there is a tradition on each river that in former times of plentiful fish a law was passed for that particular district forbidding employers to feed it to their apprentices more than twice a week, sometimes varying it to three times during that space. This legend obtains on the Connecticut, Housatonic, Penobscot and other American rivers. We have heard it in Germany on the Rhine, the Weser and the Oder, and in England it also exists. We have just come across it in an old volume of the London *Sporting Magazine* for 1833, vol. 32, in which a writer tells that "Perth servants were not obliged to eat salmon more than twice a week." The singular part of this legend is that it is always told to you as a rich joke, peculiar to that locality, and that the narrator firmly believes it.

FLORIDA.—We call the special attention of Florida tourists to the reliable information contributed in this issue by our well-known correspondent Al Fresco. Those who contemplate a trip down the southwestern coast should not fail to consult the map of that region which Al Fresco so courteously places at their service. We shall take great pleasure in forwarding the success of projected Florida cruises.

PULLMAN'S PALACE CAR CO.—Col. D. N. Welch having, on account of continued ill health, tendered his resignation as General Superintendent of the Company, and the same having been accepted, to take effect on the 25th inst., Mr. George F. Brown, heretofore assistant to the General Superintendent, will, until further notice, perform the duties of that office under the title of Acting General Superintendent.

A WORD TO OUR READERS.—Every reader of the *FOREST AND STREAM* is requested to send us the names and addresses of such of his friends as are interested in field sports, but who are not among our subscribers. To all such we will send free specimen copies.

BRENCED SHOT.—*Honover County, Va.*—I notice in the last number of *FOREST AND STREAM* a communication from one of your correspondents about shot bunching, which possessed a peculiar interest for me, as it showed me that my experience in this was not singular. In September I think it was, I took my breech-loader to try its range, closeness of shooting, etc., fired at the side of an unoccupied house eighty yards off. On examining the radius and penetration of the shot, I found to my surprise a freshly made hole of irregular shape, as if made by a tumbling rifle ball of .32 cal. A gleam as of lead caught my eye, and taking my knife I extracted fourteen shot from the hole. I used Tatham No. 8 chilled, out of a 12-bore Porter gun, which, I am assured, is a second quality Scotch gun. I understand that it is the habit of gunmakers to put some other than the firm name on those guns which on trial do not come up to their standard. This may bear out your view—that the defect is of the gun and not of the shot. In a future communication I may give your readers some account of partridge shooting in Virginia, such as we heretofore indulge in. Though an enthusiastic sportsman, I am hardly naturalist enough to say whether our partridge are really quail, but one thing I know—they will continue to be known as partridges in Virginia. J.

The Sportsman Tourist.

SOUTHWEST FLORIDA.

IN your issue of Oct. 7 I notice a communication entitled "A Florida Cruise." In the columns of the *FOREST AND STREAM* in years gone by, I directed the attention of sportsmen to the attractions of the southwest coast of Florida; as I am personally acquainted with it, and as I write an annual letter, I have something to say in 1890. Your correspondent asserts that "among the islands of Charlotte Harbor there is a species of panther called Mexican lion, and we are particularly anxious to learn on these fellows." The words "thin out" imply that these animals are plentiful, but to "Al Fresco" and some of his sporting friends who have visited these islands, the statement of your correspondent is too "thin." If these animals ever existed on these islands it will require a forty horse-power telescope to find them in thinning out quantities in the year 1890.

Your correspondent states that "when they get away down they will quit their boat and take an ox-cart for the interior." When sportsmen get "away down" they will discover the fact that ox-carts are not obtainable. The most southern point where an ox-cart is obtainable is Fort Meyers, on the Colosahatchie River—but this is not "away down." The only vehicle used on the coast "away down" is a boat.

The writer refers to guides. My experience, and that of others, is that they are not always reliable. Last winter some of my friends chartered a sloop and engaged the services of the "best pilot on the coast." I advised my friends to copy my maps of the coast south of Charlotte Harbor. On one was shown the islands, passages, channels, entrances of and streams emptying into Estero Bay. The pilot ridiculed the idea of using maps, and would not refer to them. My friends were desirous of ascending the Corkscrew River, and as the pilot refused to be guided by charts they failed to find this stream. Pilots are familiar with the coast north of Punta Passa, but south of this point, with the exception of Estero and Marco Passa, they know but little of the coast. I have compiled a map from actual surveys, on a scale of two inches to the mile, of the coast from Little Gasparilla Pass to Cape Romano, showing each island, pass, channel, lagoon, bay and stream, and if any gentleman calls at my residence in this city and presents a note or card from you, such person will be allowed the privilege of copying the maps.

Let me repeat what I have already stated in your columns that the fishing in the southwest coast of Florida, south of Charlotte Harbor cannot be excelled by any portion of the United States. The winter is the dry season, and unless an exceptional season occurs, rain is seldom seen during the winter months in South Florida. The climate is all that can be desired, and its healthfulness is beyond a doubt. On the coast fish exist in great variety and in endless quantity. Northern tackle stores advertise "fishing outfits for Florida waters," and while the supply is adapted to the St. Johns River and lakes, it is unsuited, as a rule, to the southwest coast, unless the piscator confines himself to the capture of sheepshead, black bass and sea trout. To capture cavalli, channel bass, tarpon and jewfish, superior hooks and strong lines are a necessity. A full line of tackle adapted to the capture of our large fish can be purchased in this city on as reasonable terms as in the North. In this connection I may remark that we require a spinner for Florida waters of sufficient strength to haul fish weighing from ten to fifty pounds, as usually made, are too flimsy, and if a twenty or thirty pound bass is hooked and landed, the bait is bent, twisted and rendered useless. What is required for the southwest coast is a spoon or spinner, with a strong brass swivel, a stout snood, and one or two strong, reliable hooks. Three years since one manufacturer endeavored to supply the want. His spoons possessed strength, but they would not revolve, and his fish-hooks were unsuited for the tarpon, trout, snook, etc., and although a small one is required, it should be strong for a bass may be hooked running from twenty to thirty pounds. Cannot some manufacturer supply a much needed want—a spoon or spinner suited to the capture of cavalli and channel bass?

The southwest coast affords a fine field for the fly fisher. One of my friends captured eleven distinct species of fish in one season on one stream. Cheap, gaudy and large flies will take the sport, and the most of the fish caught has furnished unrivaled sport; but to the expert, the noble tarpon offers an opening for fight and sport that cannot be equalled in any other portion of the world. For activity, light, speed and gymnastic performances the tarpon excels anything in the way of fish life; tarpon range from 50 to 150 pounds, and I would not recommend any red fisherman to indulge in this description of fishing unless he is provided with a reel which will carry 750 yards of strong gut line, and this line (St. John's) in the summer months, and during the past season at least 500 were hooked near Mayport, but none landed. Last winter some of my friends hooked five within one hour at Gordon's Pass, but all escaped. The difficulty was in the short lines and the application of too much muscle on the part of the fishermen. In many of the inlets and streams of the southwest coast these fish exist in great quantities, and are worthy of the notice of Cuttyhunkers. When hooked they take a lightning run of 50 or 100 yards, followed by a series of leaps in the air of six or seven feet. If they fail to shake out or straighten the hook the performance is kept up.

At many of the inlets, at the young flood, the red fisherman can stand on the shore and hook channel bass at almost every cast. On the Colosahatchie, above the islands, and at other points, large cavalli can be hooked almost as rapidly as the spinner can be thrown to the stern. In numerous localities the fisherman can capture his favorites almost as rapidly as he can bait and land them. If a chance of sport is desired, at certain points jewfish, ranging from 150 to 300 pounds, can be captured. At some of the inlets, notably Marco, the lover of heavy weights can indulge in the capture of loggerhead turtles, from 200 to 600 pounds. If such sport is esteemed too tame for the ardent fisherman, he can amuse himself capturing sharks of almost any size desired.

When I was "away down" the coast I was compelled to start from Cedar Keys or transport a boat to Key West and make that my point of departure. But recently a change has been effected in the way of transportation on the southwest coast. Through the enterprise of Miller and Henderson, of Tampa, a number of new, commodious and full powered steamers have been placed on the coast. A steamer leaves Cedar Keys for Manatee, Tampa and Punta Rassacum weekly; To Chrystal River, Bayport, and Glen Water Harbor weekly, and the Sandings to the St. James as far as New Troy once each week. It is probable that a steamer will be put on the

route from Cedar Keys to the Waussa River and St. Mark's. The price of passage on the steamers is reasonable, and the cost of transporting boats from Cedar Keys to Punta Rassa or Key West will be from six to twelve dollars, according to size and weight. Major Galpin, the agent of the steamship line at Cedar Keys, is an ardent sportsman, and I will guarantee that he will extend the hand of fellowship to disciples of the rod and gun, and aid them in every way possible.

Dr. MacIvaine is completing a large hotel at Cedar Keys, which will be finished about December. The Doctor informed me that it would be supplied with new bedding and furniture, and managed by a Northern man who knows how to "run a hotel." Comfortable hotel accommodations have long been needed at the Keys, and we feel assured that "The Seaview" will merit and receive a full share of patronage.

Sloops of from four to six tons, capable of accommodating four persons, with captain, can be chartered for about \$100 per month. The charter party would have to supply necessary provisions. A party of say two could enjoy a pleasant cruise by transporting a boat of from sixteen to twenty feet in length by steamer from Cedar Keys to Punta Rassa or Key West. A supply of provisions could be stored at Punta Rassa until wanted. Between Punta Rassa and Cape Sable sportsmen could enjoy hunting, fishing and shooting to their entire satisfaction. In my last trip I transported a boat from Cedar Keys to Key West, and from the latter city worked my way northward to the former place. The boat was sixteen feet long and six feet beam. In her I found room for five persons, provisions, three five-gallon water casks, bedding, gun, rifle, fishing-rods, tackle, charts, compass, stove, etc. At night I spread an awning over the boom, placed stove and water kegs on deck and secured comfortable sleeping accommodations for two. For a canoe trip the southwest coast is unequalled. The coast is shallow and harbors can be made every few miles. Unless the wind is blowing on shore the water is as calm as a mill pond. The wind is generally from the northwest to northeast during the winter, and rough water is seldom seen.

There are but two points along the coast where it is necessary to run outside—from Girdens Pass to Estero Inlet, a distance of eleven miles; and from Kettle Harbor to Casays Pass, a distance of fourteen miles. In my last trip, in a sixteen foot boat, I made most of the run outside. As I have enjoyed so many pleasant hours on the Southwest coast I wish others to follow in my tracks. Persons can ship boats from New York by schooner to Jacksonville for a trifle; and if consigned to Peter Jones he will take charge of them until called for, and the charges will be moderate. Parties can purchase boats in this city at favorable terms. The freight on boats from this city to Cedar Keys is \$1 per hundred weight.

Col. Allen has placed a steamer on the Kissimmee River, and will make semi-monthly trips from Lake Tohopekalga to the lower end of Lake Okechobee. He has had suitable boats constructed for sportsmen. By leaving the steamer at Isopoga Creek, where it enters Kissimmee River, and by ascending the former stream to Lake Isopoga, sportsmen can reach almost unexplored regions north of Lake Okechobee—a region where game has not been disturbed since the last Indian war. Deer, bears, panthers, turkeys and ducks exist in plenty, and have not been disturbed. The fishing is said to be superb. A friend in whom I can place dependence visited Isopoga, and from his statements the neighborhood of this lake must be a sportsman's paradise. To reach this point the sportsman must take steamer from Jacksonville to Sandford, railroad from Sandford to Orlando, from Orlando a hack line 18 miles to Lake Tohopekalga. The steamer leaves the dock on the 1st and 15th of each month. W. H. Bliss, 33 East Bay Street, Jacksonville, is the agent of the boat, from whom information can be obtained. Adventurous sportsmen can transport a boat from Sandford to Tohopekalga, descend the Kissimmee River to Lake Okechobee, cross the lake and ascend Fish Eating Creek to New Fort Centre. One of the party could follow the old Military road to Charleston's, distant 10 miles, and at that point secure a bullock team and wagon to transport a boat to Fort Thompson, distant twelve miles from Fort Centre. The Calloosahatchee can be descended to Fort Myers, where a supply of provisions could be obtained, and from that point the southwest coast could be worked to Cedar Keys by boat and outfit sold, and steamer taken at Punta Rassa for the return trip. From Lake Tohopekalga the entire route to Fort Myers is through an almost unsettled country stocked with game of all kinds.

Another pleasant boat trip is up the St. John's to Salt Lake. Railroad to Titusville, and boat to Lower Indian River and Lake Worth. At the lower end of L. R. and the inlet of the lake most excellent fishing can be secured. If tourists are adventurous and desire an extended trip they could assume themselves at Lake Worth until a westerly or northwesterly wind set in, and with a fair wind and a smooth sea they could make the run to Bay Biscayne, a distance of about 70 miles. Easterly or north-easterly winds make an unpleasant sea on the Atlantic coast. But during the winter months coldsnaps are accompanied by westerly or northwesterly winds which blow for two or three days, and a run like that referred to may be successfully made. The sportsman would encounter no difficulty from rough water would be encountered in making a trip to Key West, Punta Rassa or Cedar Keys. The navigation among the Keys is somewhat difficult as a consequence of shoal water, and parties attempting it should secure the services of a pilot or purchase in the North a series of fire charts of the Florida Reefs published by the government—cost of the series \$7. There is a channel inside the reef, and to the east of the reef and channels between the keys, but without a pilot the sportsman would encounter much difficulty and sand banks render the navigation somewhat difficult. In conclusion I will remark that if any of your subscribers will visit me and present a note from you I will render them any needed assistance, or furnish them with any information in my possession.

Jacksonville, Oct. 1890.

AL. FISKE.

—Most of the game served on a Paris table comes from abroad. Thus, England and Bohemia send the pheasant; Scotland, Spain and Algeria, the red or Guernsey partridge; Egypt, and especially Italy, the quail; Russia sends the heatcock, the hazel hen, the lapole, and the bustard, a rare bird in the French capital; Corsica, the edible ousel, and Italy, the titlark and the white tail. Snipe, water-rail, teal, wild duck, and wild swan come from Holland and Italy. Four or five birds are on an average sent up to Paris every year from the forest and the localities where these exist, old people may be found who at one time hunted deer, bear, wolves and panthers. Such is the case here in northern Pennsylvania. It is the same in northern New York. So of all, or nearly all

Natural History.

RAIL INLAND.—A correspondent writes us from Cortesville, Pa., saying that he killed a sora rail there on Saturday, October 23, and asking if it is not a stranger so far inland. These birds are by no means uncommon in the Chester Valley, and we have killed them there. It is a mistake to imagine that they are only found on the sea-board. They are very abundant almost everywhere if there is good ground for them. In Illinois, Michigan and Wisconsin they are killed in great numbers, and we have found them in the reeds about alkaline lakes in the very heart of the Rocky Mountains.

THE FLIGHT OF BIRDS.

Few problems have caused more thought to zoologists than that which concerns the migration of birds. The many observations that have been made by ornithologists in many countries, though they have served to throw some light on the subject leave it still obscure, though we may hope that the day is not distant when we shall know more about these matters. The London Standard recently printed some interesting facts with regard to the flight of birds, which we give below. It says:

We know that most migrants fly after sundown, though many of them select a moonlight night to cross the Mediterranean. But that their meteorological instinct is not unerring is proved by the fact that thousands are every year drowned in their flights over the Atlantic and other oceans. Northern Africa and Western Asia are selected as winter quarters by most of them, and they may be often noticed on their way thither to hang over towns at night, puzzled, in spite of their experience, by the shifting lights of the streets and houses. The swallow or the nightingale may sometimes be delayed by unexpected circumstances. Yet it is rarely that they arrive or depart many days sooner or later, one year with another.

Prof. Newton considered that, were sea-fowl satellites revolving round the earth, their arrival could hardly be more surely calculated by an astronomer. Foul weather or fair, heat or cold, the pullins repair to some of their stations punctually on a given day, as if their movements were regulated by clockwork. The swiftness of flight which characterizes most birds enables them to cover a vast space in a brief time. The common black swift can fly 276 miles an hour, a speed which, if it could be maintained for less than half a day, would carry the bird from its winter to its summer quarters. The large purple swift of America is capable of even greater feats on the wing. The chimney-swallow is slower—30 miles per hour being about the limits of its powers; but the passenger-pigeon of the United States can accomplish a journey of 1,000 miles between sunrise and sunset.

It is also true, as the ingenious Herr Palmen has attempted to show, that migrants during their long flights may be directed by an experience partly inherited and partly acquired by the individual bird. They often follow the coast lines of continents, and invariably take, on their passage over the Mediterranean, one of three routes. But this theory will not explain how they pilot themselves across broad oceans, and is invalidated by the fact, familiar to every ornithologist, that the old and young birds do not journey in company. Invariably the young broods travel together; then come, after an interval, the parents; and, finally, the rear is brought up by the weakly, infirm, molting and broken-winged. This is the rule in autumn. The return journey is accomplished in the reverse order. The distance traveled, seems, moreover, to have no relation to the size of the traveler.

The Swedish blue-throated performs its maternal functions among the Laps, and enjoys its winter holiday among the negroes of the Soudan, while the tiny ruby-throated humming bird proceeds annually from Mexico to New Foundland and back again, though one would imagine that so delicate a little fairy would be more at home among the cacti and leaves of the Tierra Caliente than among the firs and fogs of the North.

DOES THE FLYING FISH FLY?—This question having been raised by those who do not consider that the motion made by the flying fish is such as to be properly called flying, Prof. Jordan in a recent letter to the American Naturalist gives the following extract from his field notes containing his observations on the Western species known as *Ereopis californicus*, Cooper:

It flies for a distance sometimes of nearly a quarter of a mile, usually not rising more than three or four feet. Its motion in the water are extremely rapid, and its motive power is certainly the movement of its powerful tail in the water. On rising from the water the movements of the tail are continued for some seconds until the whole body is out of the water. While the tail is in motion the pectorals are in a state of very rapid vibration, and the ventrals are folded. When the action of the tail ceases, the pectorals and ventrals are spread, and as far as we can see, held at rest. When the fish begins to fall, the tail touches the water and the motion of the pectorals resumes, and it is enabled to resume its flight, which it finally finishes by falling in the water with a splash. When on the wing it resembles a large dragonfly. The motion is very swift; at first it is in a straight line, but this becomes deflected to a curve, the pectoral on the inner side of the arc being bent downward. It is able to some extent to turn its course to shy off from a vessel. The motion seems to have no reference to the direction of the wind, and we observed it best from the bow of a steamer off Santa Catalina Island, in early morning, when both air and water were free from motion.

HABITS OF THE BEAVER.—Wellsboro, Oct. 23.—My attention has just been called to an article in FOREST AND STREAM, criticising my remarks as to the beaver being first of the more important animals to vanish before the white hunters and trappers. If "E. B. B." will "take his eye and throw it along" the route from Eastern Maine to Western Oregon, and then repeat from northern Minnesota to the seashore, he might take in a half a million—more or less—of so-called beaver dams, and localities where these exist, old people may be found who at one time hunted deer, bear, wolves and panthers. Such is the case here in northern Pennsylvania. It is the same in northern New York. So of all, or nearly all

the middle or western States. Now, how many of the oldest hunters ever saw a beaver colony in active operation, or even a beaver in his native wilds? I confess I never did, and I have hunted, fished and trapped for the last forty years in all the different States, in all of which, save one, deer and bear were yet extant, but not one tail of a beaver. I concede the semi-domesticated family of beaver in Iowa. More. If "E. B. B." will go to Jasper County, Miss., he may find several beaver towns in working and active condition. At least such was the case eight years ago. They existed through sufferance and because no one thought of hunting or trapping them. They became a nuisance and an eyesore to the planters by "backing the water" with branches, and flowing arable land. They were driven away by abutting a few sticks from the upper portions of their dams at intervals of a few days. At first they worked with industry to replace the lost timber, but after three or four attempts to keep their dams in order, finding their work in vain, the entire colony would suddenly disappear to come back no more. And all the same, the rule is as I have stated. The exceptions are barely sufficient to prove it. If gentlemen in the Valley of the Mississippi who know of beaver towns would send notes thereof to FOREST AND STREAM it would make interesting and instructive reading matter.

NESMUK.

AMERICAN MUSEUM OF NATURAL HISTORY.—The autumn reception of the Museum of Natural History took place on Tuesday, October 26, and was an occasion of no little interest. A large number of visitors were present, among whom were many of the Trustees of the Museum and a number of scientific men from out of town. Among the recent additions to the collections were the Binney and Bland collection of shells, now arranged in the lower hall. This collection includes the types of the species described by those authors in their work, and is thus of very great value. The skeletons of three native Australians form interesting addition to the osteological collection. The Maximilian collection of birds have been looked over carefully, put in order and mounted on new stands, and the collection of North American birds has been increased by the addition of six hundred specimens.

The Ethnological collection is now very large and contains many unique specimens.

The gallery stairway shows a detailed ethnological map of Africa, drawn on a large scale by Professor Bickmore. The additions to the ethnological collection from the South Seas consists of a war canoe (case No. 1), New Zealand weapons and carvings (case No. 3) and stone axes from New Guinea (case No. 4). The set of ornaments and carvings from British Columbia, presented by Mr. H. R. Bishop (case M), proved to be interesting, as many items were included which appeared unfamiliar to most people present. The geological collection includes the types of the species described by those authors in their work, and is thus of very great value. The skeletons of three native Australians form interesting addition to the osteological collection. The Maximilian collection of birds have been looked over carefully, put in order and mounted on new stands, and the collection of North American birds has been increased by the addition of six hundred specimens.

The collections are in admirable order and are under the care of careful workers, and the Museum is more attractive than ever. The Elevated Railroad has largely increased the number of visitors, and it is evident that its usefulness as a public instructor is only beginning. Its value to the schools of our city can scarcely be over-estimated.

SHARKS ARE VIVIPAROUS.—While spending the winter with my family in St. Augustine, Florida, I saw a large shark, about eight feet long, caught by some fishermen from the dock at that place. It was cut open in my presence, and from the womb there was taken some five young ones (there were this number at least, but might be more, as I took no notes), just about ready to come into the world, each having an umbilical cord. I took one of the young sharks, and the mother and the water, and it was off in a second, showing that it was near its birth when its mother was captured. The others were killed by the fishermen, and were fifteen inches in length.

F. G.

A MONKEY USES TOOLS.—It has been said that man is the only animal that makes use of tools, but the statement has been controverted, observation having shown that others animals do occasionally employ tools. This is especially the case with monkeys which in confinement have been observed to use stones to crack nuts, and sticks or leather straps to draw toward them objects which lay beyond their reach.

An instance of special training bearing directly on this point is given in a recent London paper:

Hollinwood, near Manchester, was the scene of a rather novel rat-killing match the other day, between Mr. Benson's fox terrier dog Turk, and a Mr. Lewis's monkey for £5. The conditions of the match were that each one had to kill twelve rats, and the one who finished them the quickest to be declared the winner. You may guess what excitement this would cause in the "doggy" circle. It was agreed that Turk was to finish his twelve rats first, which he did, and in good time, too, many bets being made on the dog after he had finished them. After a few minutes had elapsed it now came the monkey's turn, and a commotion it caused. Time being called, the monkey was immediately put to his twelve rats, Mr. Lewis, the owner, at the same time putting his hand in his coat pocket and handling the monkey a peculiar hammer. This was a surprise to the onlookers, but the monkey was not long in getting to work with his hammer, and, once at work, he was not long in completing the task set before him. You may talk about a dog being quick at rat-killing, but he is really not in it with the monkey and his hammer. Had the monkey been left in the ring much longer you could not have told that his victims had been rats at all—he was for leaving them in all shapes. Suffice it to say the monkey won with ease, having time to spare at the finish. Most persons present (including Mr. Benson, the owner of the dog) thought the monkey would win the rats in the same manner as a dog does; but the conditions said to kill, and the monkey killed with a vengeance, and won the £5, besides a lot of bets for his owner.

NORTHERN NEW YORK.—Moria, Oct. 24.—Several bears have been seen near the village lately. Fourteen were seen last week on a farm only a mile north of the village. One was killed in the town north of this village. A few days ago a large bear was seen in the woods near here and was killed by the force with which it struck was found dead on the floor. They are very plenty in this vicinity.

A. C.

hook and heavy tackle, generally, for it is a powerful fish, often weighing fifty pounds and very gamy. They are taken from a boat, and when a stout bass with large reel, capable of holding fifty to seventy-five yards of heavy line, is used they afford good sport and only succumb when completely vanquished.

FISHING IN FOX RIVER.

FOX RIVER sources in Lake Geneva, a beautiful sheet of water in the southeast corner of Wisconsin. It is named by the Indians "Kish-wa-ko-ta," signifying "crystal water," an acronym of its common transparency. Its outlet is Fox River, which flows from the north into the State of Illinois, then a little westward until it greets the waters of Des Plaines at Ottawa, where they together form the Illinois River. It is about twelve rods from shore to shore, and very uniform in width, like most rivers in prairie countries, where very few, if any, hills and rock-ledges are encountered sufficiently formidable to interrupt their even flow. Fox River has a swift current and furnishes a splendid water-power, which is utilized by the many and various manufactories at Elgin, St. Charles, Geneva, Batavia, Aurora and other thriving cities and villages situated upon its banks. It also has attractions for sportsmen, armed with rod and gun. It is quite a rendezvous for wild ducks; many have been shot this month along this river. A neighbor of mine went out a few mornings since for a little hunt before breakfast. He brought home seven ducks, which he espied from behind a thickened shore disporting together in the river. With one barrel he killed three outright and winged two, which his dog soon retrieved; and before returning home he added the remaining two to the unfortunate mates. This was certainly a specimen of good marksmanship, and sport enough before breakfast to give a man a good relish for his coffee and to make him good-natured all day.

Also, the fishing is first-rate. Black bass predominate, though many wall-eyed pike are caught, the meat of which is, by many, considered superior and preferred to bass: it is very white, juicy and sweet. A party of four of us went up in August to South Elgin and caught, in one afternoon, fifty pounds of black bass and pike, the heavier ones weighing four pounds. I have been up twice since with a friend, and returned home with a handsome string each time. I find quite a number living on the banks of this river who have acquired the "wrist knock" and who cast a fly very gracefully and skillfully, and twist a spoon just right to entice and capture the wary denizens of the deep. A stranger, visiting any of the villages washed by the waters of Fox River, would soon learn that the fishing was good, from the display to store windows (that he could not help but observe) of reels, lines, books and rods—from the split bamboo and greenhorns shown to the commoner sort that boys begin their practice of the fine art with.

The stream is protected against fishing by barbarous methods. A member of the "Batavia Fish Association" relates how a man living in the vicinity would persist in fishing with a net, in spite of the law. One day he discovered, to his dismay, that a fatal dose of acid had been administered to his belligerent net, and with uplifted hands, he poured forth his lamentation: "Some tam rascal, he go and put on pulson on my net all over, and he falls all to pieces like nothing." Who that particular rascal was he has never been able to ascertain. The trick proved effectual; it not only put an end to his net, but a stop to his fishing after that fashion. It has occurred to me that a summary enforcement of the game laws, by a free use of acid, anonymously applied, might be the easiest, cheapest, surest, and best way to secure protection against the many unattracted pirates and butchers that infest our lakes and rivers.

Hix.

A PLEA FOR THE "SUNFISH"—[Eupomatia.]

CLEVELAND, O., OCT. 21.

Editor Forest and Stream:

You speak of the "sunfish" or "pondfish" as a worthless animal. How can you say this of a fish that gave so much sport to me in my boy days, and is ever the pride of the youthful fisher? He is harmless, never eating the spawn or young of any other water animal, and as a pan-fish he is not excelled; a beauty in his spring colors, and fecund beyond all measure. In June he fans out his round nest, a foot in diameter, in the fine sand, deposits his eggs and milt and guards them closely until the young are able to care for themselves. Please remember that little boys and girls like to go n-fishing. I am in favor of the sunfish and bullhead (see Dr. Garrick's book, page 106). In the summer months the sunfish will take the fly as readily with as much vigor as the trout. Fishing with the seine is much practiced during the winter under the ice in the marshes and marshes on the south shore of Lake Erie, when the fishes of the locality bed in the sunken water-weeds in numbers almost incredible. I have seen taken at one haul of the net seventy-five barrels, consisting mostly of sunfish, straw bass, big-mouthed bass and a few pickered. The flat fish are sent to market, skinned and dressed, and bring readily ten to twelve cents per pound. Excessive fishing has finally exhausted this harvest. Would you believe me when I relate that I have seen five cords piled up frozen in one mass? But it is so, and the entire lot was taken in the space of three acres of water. No wonder they are all gone, and hardly a "kiver" or straw bass of a decent size remains to tell the tale.

E. STERLING.

CATFISH TAKE THE FLY.—A correspondent writes us as follows: "In your last issue I notice that a catfish was taken with a fly in the Pardolones River, Texas, and that you speak of the event as the first recorded instance of this kind. I send you herewith an extract from a letter to the Syracuse, N. Y., Journal, of April 5, 1880, written last winter by the well-known sportsman Mr. James Geddes, of that city, who took a ten-pound catfish on an eight ounce Skidmore rod." The fact that these fishes take a fly at all is new to us, and we are glad to place the valuable testimony of so excellent a fly fisher as Mr. Geddes upon record. Here is the extract:

At Palatka we found that the hole on Drayton Island, near the fishing ground we were bound for, had been burned, so we went by steamer to Mt. Royal, where we found Messrs. Kirby and Wright, of Auburn, N. Y., living among their orange groves. We chartered a large sail boat of Mr. Varnum to take us over the twelve miles between Mt. Royal and the famed Salt Creek. This creek is made from a huge spring

about five miles from Lake George, which lake is simply a widening of the river St. John. After a delightful sail of two hours we cast anchor at the mouth of the creek and went over the bar in a small boat. When once in the creek you are in water as pure and clear as crystal. Up the creek to the grand pool at the spring the sportsman is in his paradise.

The Captain hoisted his eight ounce fly rod, while I did likewise, and business commenced. Hardly a moment passed when I heard from the other end of the boat, "Ain't he a whopper?" and I cast my eye over my shoulder to see the Captain wrestling with a monstrous bass. At that moment I was fast to his mate, and the fight went on; first out of the water four feet, then the whirl of the reel and he would run fifty feet before another leap. At last they were brought to net, and a pair of Oswego bass lay at our feet that would crowd six pounds each. The sport continued till the skipper who accompanied us stood up to his knees in fish, and suggested that it was about time for lunch, a suggestion always in order. We dined from a well filled lunch basket at the side of the great boiling spring, among tropical scenery and vegetation. The lunch over we again took our places in the boat, when the Captain fastened to another "whopper," and seemed to have the game all in his own hands, as I had seen him land three large bass and I had not had a rise. But I had my revenge. Soon up came to my fly—which, by-the-by, is an R. W., named after our renowned and accomplished sportsman, Reuben Wood—a fish of huge dimensions. I strike, and in a moment fully fifty feet of line are run out. To the surface he came, but not to jump, and what did I see? Only a glance. It looked very much like an enormous catfish, but I could not believe a catfish could ever be induced to come up twenty feet for a fly; but the R. W. has been known to do unheard-of things. The Captain said, "You have got the boss bass this time." I replied, "Catfish." He said, "Nonsense; such a thing was never heard of." I still insisted on "cat." The skipper said, "Huge bass," and I "cat." The Captain wagered a bottle of the best wine "it was not a cat." I accepted on the understanding that the fish must be brought to net to decide the water; and, Mr. Editor, I had a twenty minutes' fight with that cat, and any one who says that a catfish on an eight-ounce rod is not "some pumpkins" is sadly mistaken. The plant Skidmore won the day, and Mr. Catfish, of about ten pounds, was safely landed. The Captain looked and said, "You always were looking all kinds of monstrosities, and now you have gone and hooked a catfish. I give up the bet."

Two hundred pounds the bass, and our boat looked like a fish market, and the Captain remarked "we were not fishing for market, we had better quit," which we accordingly did, and at 10 p. m. were again at our hotel, having enjoyed a splendid day's sport, like many I have enjoyed in the same pool in years gone by.

This creek can never be depleted, as the immense river St. John sends up its millions of bass into this pure, clear spring, which, not liking the warmth of the river, remain there. The spring is enormous, making a creek two hundred feet wide and ten deep.

On this subject our Cleveland, O., correspondent, Dr. E. Sterling, writes:

You speak of the catfish taking the fly. I had one take a red spoon that was dangling two feet above the water; and "cat" has an adipose dorsal fin. Taking these facts altogether do you not think it might have contained some salmon blood?

We can't say; we only know that, dazed with wonder as we are, we would not be surprised if it could be shown that the gentle catfish, who usually gropes the bottom and roars, when he does roar, as gently as a sucking dove, was even now a-evolutin' into a fierce fly-devourin', lofty tumblin' salmon, a-goin' about a-seekin' what inoffensive insect he may devour.

SMELT FISHING.—This is the way this dainty little fish is taken near Boston, as told by the Sunday Budget:

Almost any of these frosty mornings groups of fishermen may be seen along the city wharves, with rod and line and the strawberry box for bait, endeavoring to catch these shiny little denizens of the harbor. The season is now at its height and will continue until the first fall of snow, when they disappear for a period. About the first of January they are again abundant and may be caught through the ice until the first of March. The best time to catch them now is during the flood tide, on days when the sky is overcast and the air cool. They may be caught at almost any of the wharves, although there are a few places where the fish congregate in considerable numbers, especially where the incoming tide makes a small whirlpool eddy around the piles of the wharf. The unfrequented wharves of the Mystic River, and the stone walls at the mouth of the Mystic River, and the Boston & Albany railroad bridge, between East Boston and Chelsea, are favorite resorts for fishermen, large numbers of smelts having been caught at the latter place. There is a law in this State against seining the fish, and consequently they bring a good price, twenty cents a pound being asked at the markets, and there is always a demand for them. A light pole, delicate tackle and fresh shrimps are needed, and if the sportsman is skillful—for there is quite a science in securing them—a good haul may be obtained.

SPAWN FISHING IN THE RANGELY LAKES.—Boston, Mass., Oct. 20.—Editor Forest and Stream: In your issue of the 28th instant is a paragraph relating to the taking of large trout in the Rangely Lakes, in which it is stated that many large fish were taken this fall by the use of spawn as bait. Although the paragraph referred to does not state it, it is a fact that the eleven pound brook trout it speaks of as having been taken at the Erper Road was captured by the use of spawn, after every other method had been exhausted. This noble fish, which attracted much attention when exhibited in Bradford & Anthony's window in this city, and which was afterward purchased by the Smithsonian Institution, was one of several large trout which had for some days been seen on the spawning beds, and which many expert fishermen endeavored to capture by means of various and seductive flies and worm bait without success. Finally, taking advantage of the fact that few trout can resist spawn, some persons who cared little for the future of the fishing, and were only anxious for the evanescent glory of making a big score, resorted to the use of spawn, and the big fish in question was one of the victims.

And other parties who had permitted to fish out of season, granted them by the Fish Commissioners, adopted the same practice with such success that in five days they took over

fifty breeding trout, weighing in the aggregate over two hundred pounds. Every fish was taken from off the spawning beds, and no man can say how many young trout which would have aided in the restocking of that great fishing resort were destroyed by these captures.

If, as is claimed, there is no law against the use of spawn as bait, it certainly seems as if the law to that extent should be changed. Further, it is pertinent to inquire what right the Commissioners have to grant such permits, the exercise of which produces such fatal results. If there is no legal way of prevention, it only remains to appeal to an enlightened public sentiment, of which your journal is the best exponent, and to ventilate this subject thoroughly, to the end that so-called gentlemen fishermen, who hide themselves behind a claim of legal right, may be shamed into a compliance with the requirements of fair dealing, and so made to abstain from spawn fishing, than which no more destructive method of killing breeding trout has ever been devised.

The influence of your paper is invoked in favor of
PAIR PLAY.

THE NORTHERN BARBOUTA.—This small fish is more plentiful on our coast than is suspected. Its small size and agility almost always enable it to elude the net. They are plenty in Peconic Bay this season, and last week Mr. John Tallmadge, a fisherman of Sag Harbor, N. Y., saw a big school go through his net as he was raising it, but only one happened to be caught. He showed it to us, and we identified it as *Sphyræna borealis*, Defay. The fish is usually eight to ten inches long, and about three-quarters of an inch in diameter. Its teeth are formed by so small a fish, resembling a pike's somewhat; the lower jaw is the longest; two dorsal fins, with a wide space between them; head about one-third of the length. The fishermen generally do not know this fish for the reasons given.

OLD CANNED SALMON.—A Maine paper is responsible for saying: "At the office of the Portland (Me.) Packing Company is a can that was packed with salmon in 1814. The vessel in which the can was shipped was wrecked, and a short time ago this can was taken from the wreck. It was opened the other day, and the contents were found in perfect condition."

THE MACKEREL CATCH.—Norton, R. I.—The fishing has now settled down to mackerel, very few boats going after fish. The mackerel that are caught now are mostly No. 2, and very fat, with quite a lot of No. 1 among them. The boats go with two men, and average from 50 to 200 fish to a boat. They are caught anywhere from Gould Island out to the light-ship.

OCCASIONAL.

Fish Culture.

AFTER BIG TROUT EGGS FOR IOWA.

BEING here in company with my father, Mr. B. F. Shaw, for the purpose of securing salmon trout eggs for our State (Iowa), a few lines from this section of the country may be of interest to you.

Grand Marais (pronounced Mo-Ray) is situated 105 miles from Duluth, on the north shore of Lake Superior, in Cook County. This country is about 70 miles long by some 20 to 50 wide, with a white population of 15 men and one woman. The balance of the population are mostly Indians, of the Ojibwe (Chip-pe-wa) tribe, together with a few half-breeds, mostly Indian and French, in all about 200. We arrived here a week ago yesterday. On Friday last we had secured about 200,000 eggs, but on Friday night a storm destroyed about half of them.

The storm is said by those who have lived here for the past 12 years to have been the worst ever known. Many of the fishermen lost their net boats, fish, fish-houses, and in many instances their dwellings. The storm has left us such continued bad weather that the fishermen have been unable to lift their nets, and until it changes for the better shall be unable to secure any more of the 2,000,000 eggs that we want.

The country is covered with snow; on the trail up and down the lake shore it is reported to be 14 inches on the level. The temperature here for the past three days has been below freezing, and the inland ponds are frozen over. A good many carps are killed here during the winter season.

Grand Marais, Minn., Oct. 19. E. D. SHAW.

GROWTH OF CARP.—Office of the Fish Commission, Austin, Texas, Oct. 4, 1880.—Professor Spencer F. Baird, Washington, D. C.—Dear Sir: I saw a day or two ago one of the carp sent me last winter (these fish were the young of 1879 and about three or four inches long when received); it measured twenty inches. I am inclined to think they spawned this last summer, for the reason that the pond is now filled with small fry, unknown before in the pond. Should it prove to be correct I will inform you. Respectfully,

J. H. DINKINS, Fish Commissioner.

GROWTH OF CARP.—Mr. Geo. W. Hopkins, of Mount Simli, Long Island, N. Y., received some carp last spring from the national carp ponds at Washington, through Mr. E. G. Blackford, Commissioner of Fisheries for New York, which were then about three inches in length, but by the first of October would measure from twelve to fourteen inches.

THE ILLINOIS FISH COMMISSION.—Another addition to our list of Fish Commissioners comes from Illinois. We stated that the term of Mr. Briggs had expired and that no appointment had been made in his place. We wrote him on the subject, but it appears that he was absent. The following has just been received:

KANKAKEE, Ill., Oct. 25.

Editor Forest and Stream: I find your letter of the 5th inst. awaiting my return home. My appointment as Commissioner of Fisheries was for the period of one year, dating from the 23 day of July, 1879, with the right to hold over until my successor shall be appointed. I have not been notified of the appointment of a successor.

J. SMITH BRIGGS.

CARP FOR DISTRIBUTION IN NEW YORK.—Mr. E. G. Blackford, of the New York Fish Commission, has received from Prof. Baird a lot of 1,000 young carp for distribution. The fish are about three inches long and can be had by applying

became known and appreciated as an acknowledged authority on the subjects of which it treats. Shortly afterward Mr. Greener received an advantageous offer from a Birmingham house, of a partnership, to superintend the manufacture of a superior description of sporting guns, which he accepted; and, on his leaving Newcastle, my correspondence with him ceased.

The recollection, however, of the discussion I had held with him incited me to endeavor by experiment and calculation to discover some method by which closeness and strength might be combined in such proportion as to enable a fair marksman to bring down his bird with some degree of certainty at distances from fifty yards to seventy yards. I therefore procured a few old gun-burrels, and after spending most of my leisure time for nearly two years in boring and trying, and considerable time in making calculations and diagrams, I succeeded in establishing a formula, from which I deduced the following rule of proportion: "First, make the bore a true cylinder; then divide the length into seven equal parts; open the bore at the breech end one part, with one slip of cartridge paper, and again insert the bit one-half part with a second slip; leave four parts cylinder, and open downward from the muzzle two-sevenths, using three slips, so as to make a tapering relief for the charge on leaving the gun. I have bored many barrels upon this principle, and invariably with good results. For example, the following is the record of a trial made last week of three single guns bored to this formula twenty-four years ago, and well used during that period. The conditions were those prescribed in *FOREST AND STREAM*, namely—40 yards distance, 30-inch target, 1½ ounce Canadian soft shot No. 7 and 2½ drs. Hamilton Co.'s diamond grain black powder:

No. of Gun.	Length.	Calibre.	Wt. shot.	Average.
1	32in.	.44	21b. 10z.	134 pellets.
2	32in.	.44	21b. 10z.	138 "
3	32in.	.44	21b. 10z.	128 "

All strong enough to bring down a duck at sixty yards.

In my opinion this mode of boring is all that is requisite for ordinary shooting at such game as quail, partridge, snipe, woodcock, quail, etc., as a very close-shooting gun is apt to mangle her game at short distances; but for hard shooting at long distances, such as snipe, quail, etc., the choke-bore is undoubtedly the superior. After reading the accounts of gun trials which have lately appeared in *FOREST AND STREAM*, I became anxious to learn in what "choke-bore" consisted, and having an opportunity of examining a fine English breech-loading gun belonging to Lieut. Col. Hulme, of this city, I found that, like most good things, it was exceedingly simple and easy of execution. Having in my possession a fine single gun of .41 calibre, 7½lb. weight, 33in. long, the average of which had been reduced by long use to 27, I tried the "choke-bore" of "choking" with the following result, conditions as before, but with 2½ drs. powder: First shot, 187; second shot, 186; third shot, 202; fourth shot, 189; average, 191. Nos. 1, 2 and 4 were fired under the disadvantage of a strong west wind blowing in gusts across the line of fire. No. 3 was fired in a calm interval.

Since the above trial I have choked gun No. 2 of the former record, with the effect of raising the average from 133 to 180. Verily choke-boring makes a wonderful improvement in the killing power of a gun. It is generally known and appreciated, every owner and user of a shot gun will have at least one of his barrels "choked." My powder charges may seem light, but I have found that a patent-breeched gun requires full one-sixth less powder than a flat-breeched one.

JAMES T. BELL.

RUFFED GROUSE SHOOTING.

RUFFED GROUSE and woodcock are here in Western Pennsylvania in fair numbers this season, and it has been my good luck to have been principal or accessory to the killing of eighty-four of the latter. Grouse, however, stand first in my estimation for many reasons. A dog of the proper spirit, highly broken on ruffed grouse, will soon make himself at home on any other game bird; but the reverse of this statement will not hold good—at least such has been my experience.

I believe that the ruffed grouse of Western Pennsylvania are more difficult to hunt successfully than are the same species elsewhere. Words almost fail to describe the nature of our grouse country. It is grandly wild, and these birds appear to partake of the nature of the country. In Forest County there are spots where snow may be seen until summer, and where I have waded with a noiseless step ankle deep in the velvety moss among the giant pines. The man who can bag six out of twenty shots through thick and thin, counting every bird within range—that is, no selection of shots—is an artist such as I have rarely seen, although I know a very reputable gentleman who claims to have killed his fourteen successive shots. There is no more interesting sight to me than the variegated, frost-bitten foliage covering the hills as far as the eye can carry, and no greater enjoyment than to sniff the bracing air of these enchanting October mornings, and no more glorious music than the whir and whistle of the rising grouse, or cock, especially when out for a day with the dog and gun.

Two or three years ago, while visiting at my old home in New Jersey, a gentleman in speaking of ruffed grouse remarked in my hearing that in the State of Maine these birds would hardly give way to the pedestrian, and upon being flushed would almost invariably "tree." Now, I have resided about fourteen years in Western Pennsylvania, and have spent not a little time with the birds of which I write, and excepting during the warm, pleasant weather—say up to Oct. 15—they very seldom "tree" when flushed. On the contrary, after the first few frosts a bullet (the only companion I have in mind at present) is hardly more prompt and direct in its flight.

While the brood are yet young, however, and before scattering, they not infrequently take to the trees, but after the date above mentioned, for every one that will flush into a tree there will be forty that will place a good sixty yards behind them with such astonishing celerity as to rivet the hunter, if he be a novice, with a species of "back fever."

From this date I would prescribe from 34 drams to 44 drams of best powder, and from 1 to 1½ ozs. (according to the calibre) of No. 6 or 7 shot, correctly delivered, as being the only legitimate mode of making their closer acquaintance; and even then, many a time and oft have I strained my vision in watching one carry away the whole charge, in momentary expectation of seeing him fall, but with wings rigid in a death-still float away on the wind by the force of his impetus. The breaking of a wing is the only way that I consider certain of dropping him at the shot, and then if wing-broken only, even

with your skillful old setter or pointer, the chances are not largely in your favor, as he is an adept in running and skulking.

Before my advent in western Pennsylvania I was fairly proficient on woodcock, snipe and ducks, but for the entire season, during my initiation into ruffed grouse shooting, my energy was wholly absorbed in the single bird. Their startling whirr as they rose seemed to me simple, and, before my gun half reached the shoulder my finger would involuntarily find the trigger in spite of all previous resolutions, and I rarely could tell whether I had held within an inch or a yard of the bird. Everything considered, the ruffed grouse, in my opinion, is the noblest of our game birds. He is a handsome fellow, especially as seen in his fall plumage, with ruff and tail spread, strutting after the manner of a cock turkey. A strong natural taste for the sport, with skill and muscle of the highest order in man and dog, is required to hunt him successfully in this section. He is a fine, large fellow, his flesh is clear and white and his gastronomical qualities are excelled by but few birds; and finally, the man and dog who have graduated on ruffed grouse, to quote, are "top sawyers," and may easily take a "place" in any company. My experience shows me that the "defamers" of *Junco umbellatus* are usually those persons who have been pitted against the crafty fellows and been found wanting.

Quail suit this sort of person, for his dog may point them under his feet, and the shooting is usually in an open field, excepting perhaps an occasional bunch of brush. Indeed I have heard men tell of having killed their dozen or more straight who failed to average one-sixth of their shots on grouse.

For a diametrically opposite picture you may have the heavy scrub oak and other dense brush of a hillside of nearly or quite a 45° slope, or the bottom land along a creek lined equally as thick with alder and other brush, where, in either case, a 25-yards unobstructed view is something unusual; your steady, cautious old dog within easy range, is earnestly working over the ground as though stooping on eggs, and slowly unraveling the trail. Fancy him now on belly dragging himself over a rotten log, and coming to a halt, for his experienced nose warns him that he may not go further with safety. Now he moves carefully on again, and the uneasy bird flushes with a startled boom, perhaps from an old stump or log, and anywhere from ten yards distant to away beyond range, and disappears like a flash in the very densest of the cover. The throwing up of the gun, the glance over the rib, and pressing of the trigger are simultaneous, yet deliberate; and with the report comes a shower of twines and leaves as the charge follows closely in his wake, leaving the result in momentary doubt. Or, quite likely, he places a tree in your line of sight so quickly that it receives the entire charge; or, if it be but a sapling, your blood may tingle with gratification at the cutting down of both tree and bird together.

Such is the hunting of the grouse, and as the dog brings to hand the result of your successful shot, you feel that you have earned your bird, and you appreciate him accordingly.

There are, of course, in other phases of ruffed grouse shooting, which, if pictured here, might smack of a sameness, but let me assure the "savage reader" (as Mark Twain says) that there is no monotony in the experience.

Heavy successive frosts came early the present season, and already—Oct. 15—the trees have dropped their foliage, which is anticipating matters by some two or three weeks. Upon reviewing I find that autumn leaves and grouse shooting are somewhat mixed. Since my boyhood fall tints have ever been, in my mind, associated with dog and gun, hence an occasional naming from this note to that, an apology is offered by who have followed these notes thus far, an apology is offered by

McKean Co., Oct. 1880.

BELL, MIZZLE.

GAME REGIONS IN MAINE.

TO those who desire sport with rod and gun, and have but limited means at command, I would recommend Redington, Washington County, twenty-five miles from the sea-board. The northern settlement consists of four families, farmers on a small scale, who work in the woods winters, and most of them hunters without. There is no game house kept as such, yet any family would entertain a small party at low rates. For trout, Mopang lake and stream, five miles beyond. Small and medium-sized fish abound, with good casting in mid-stream and banks. The upper and largest lake, reached by a good trail, contains large trout, but it is said they do not bite. It is not known if they have ever been tempted with the fly. There are no boats. During September and October partridge are abundant, and easily obtained. Take the highway, or any of the many tote roads that cross the country, and a bird or two will be taken without stirring out of the trail. After snow-fall, the deer shooting cannot be surpassed in any section east of Michigan. A few minutes' walk from the house brings the hunter to a perfect network of deer paths. L. C. Bridgman, an expert still hunter, will entertain small parties with substantial well-cooked food, pleasant room and luxurious bed at the ridiculously low price of \$3 per week, and if his services are required to pilot around to shoot or fish, his wages would be \$1.25 per day, "finding" himself. If his team is called into requisition, a correspondingly low tariff. Of course, this will not apply to deer hunting, as at that season he makes his harvest for family support. To reach there, take cars for Portland, thence steamer to Millbridge—fare, \$6. Daily stage to Cherryfield, five miles, fifty cents, where livery is kept by McCordrick, who will take you the twenty miles to Bridgman's at fair rate. Or if the party consists of but one or two, Bridgman would meet by appointment with his own team. Mail facilities from Cherryfield weekly. Vegetables and fruit are raised, and the land is fertile. Deer are taken up and returned same day. If parties wish to camp there are plenty of nice logging camps which Bridgman will take them to, and all supplies (minus drinkables) can be cheaply obtained at Cherryfield. The country is heavily timbered and hilly. Nearest settlement west, six miles; east, fourteen miles.

CORP. LOR WARFIELD.

Moose River is seventy-five miles north from Skowhegan, Maine. A good stage from Skow to Moose River, and an easy trail to Moose River, and an easy trail to Moose River. This would be a good place for "Lower Bunk" and party. The *Journal*, of Lewiston, gives this report of a party who have been there: "Two weeks ago last Thursday Messrs. L. D. Mariner and W. H. Johnson, of this city, started on a hunting expedition to Moose River. They arrived home to-day, bringing their spoils with them. They had splendid luck, and their account of their adventures is enough to entice any lover of sport. They shot three leavers, three muskrats, one sable, one fox and an army of muskrats, and brought home the skins. They also brought down about seventy

partridges. Among their trophies is a section of poplar tree, ten inches in diameter, cut off by beavers. They camped where the beavers had worn a track up a mountain, beaten as hard as a cattle track. The gentlemen depended chiefly on their guns for their supply of food, and roughed it after the most approved hunters' fashion, spending their evenings in watching the beavers build their dams by moonlight." E. M. G.

THE MAINE GAME LAWS.

BANGOR, ME., NOV. 1.

Editor Forest and Stream:

We call the attention of all proposing to visit the woods of Maine for sporting purposes, that no one is allowed to be killed from the 1st day of October to the 1st day of May following. *Out citizens of the State* are permitted to kill and take to their own houses for their own use, but not to sell or market, from the 1st day of February to the 1st day of May.

Trout, Tugue, and Land-Locked Salmon.

Annual close time from October 1 to May 1 following, excepting on the M. Croix River and its tributaries, and all the waters in Kennebec County, in which the close time from September 15 to May 1 following, penalty thirty dollars. "Provided, however, that during the months of February, March and April, in each year, it shall be lawful for citizens of this State to fish for, and take the most favored anglers' fashion, spending their evenings in watching the beavers build their dams by moonlight." E. M. G.

No person shall sell expose for sale, or have in possession with intent to sell, or transport from place to place in this State, any land-locked salmon, trout or togue, between October 1 and May 1 following, under penalty of fifty dollars for each offence.

And any person or persons having in possession, except alive, any of these fish between October 1 and May 1 following, or who shall transport them from place to place within this State, shall be deemed to have killed, caught or transported the same contrary to law, and be liable to the penalties aforesaid. Chapter 123, 1879.

Moose, deer and caribou are forbidden to be killed or taken in any manner from the 1st day of January to the 1st day of October following. We append the law, as also in relation to our ruffed grouse, or partridge as commonly called:

SEC. 3. No person shall, after the first day of October in the year of our Lord eighteen hundred and eighty, hunt, kill or destroy, with dogs, any moose within this State, under a penalty of one hundred dollars for every moose so killed or destroyed; and no person shall, after the first day of October aforesaid, between the first day of January and the first day of October, in each year, in any manner hunt or destroy any moose under the same penalty as above provided. Any person who lawfully kill any dog found hunting moose, deer or caribou.

Caribou and Deer.

SEC. 4. No person shall hunt, kill or destroy, with dogs, any deer or caribou within this State, under a penalty of forty dollars for every such deer or caribou so killed or destroyed; and no person shall, between the first day of January and the first day of October, in any manner hunt, kill or destroy any deer or caribou, under the same penalty as above provided. Any person who lawfully kill any dog found hunting moose, deer or caribou.

Penalties for Possession.

SEC. 5. If any person has in his possession the carcass or hide, or any part thereof, of any such animal, between the first day of January and the first day of October, he shall be deemed to have hunted and killed the same contrary to law, and be liable to the penalties aforesaid; but he shall not be precluded from producing proof in defence.

SEC. 6. No person shall carry or transport from place to place in this State the carcass or hide, or any part thereof, of any such animal, during the period of time in which the killing of such animal is prohibited, under a penalty of forty dollars. Chap. 59, 1878.

Ruffed Grouse and Woodcock.

No person shall kill, sell, or expose for sale, except alive, any ruffed grouse, commonly called partridge, or woodcock, between the first day of December and the first day of September following, under a penalty of not less than five nor more than ten dollars for each bird so killed, or had in possession, or exposed for sale. Sec. 12, Chap. 126, 1879.

We wish it to be distinctly and clearly understood that we shall rigidly enforce to the utmost extent of our power and resources these laws against all parties, whether guides or principals, who shall be guilty of their infraction.

E. M. STILLEWELL.

Commissioner of Fisheries and Game.

WILD RICE.

I AM prompted to say a word for the benefit of my brother sportsmen on the cultivation of wild rice. I have lived where it grew for the last thirty-four years and I know something about it. There seems to be a desire among sportsmen to introduce this most attractive water-fowl food where it is not abundant, and to grow it where it grows not at all. I will tell them who are getting set on plant to failure.

Some time ago the *FOREST AND STREAM* recommended planting in six feet of water. I have never seen a spear reach the top and head out at that depth. We have here two distinct varieties. One will head out at three feet deep—a spindling head with little seed. This variety always grows along the margin of rivers and on small sand bars or sand deposits in two to three feet of water. The other variety, or large species, grows from four to six feet deep. The largest growths in shallow water from one foot to one inch (general average during summer), and a part the summer no water stands around it, except rain falls and rise of streams therefrom. I have seen stalks six to eight feet tall in marshes that are mowed every year. I will guarantee that this variety will not reach the surface water and head out planted in six feet depth. There are thousands of spears seen along our rivers there that die and decay in four and five feet before the main stock reaches the surface.

P. and I give a very correct account except the depth to plant, and the time of sowing. The last two years I have taken pains to dig up the mud in our marsh as soon as the ice was out to ascertain how soon it sprouted in the spring and found it sprouted, and some quite a half an inch long, according to its depth in the mud. This was March 20 to 25. By the first of May it covers the bottom an inch out of the mud. Then bluebills, red-head and other ducks feed on it, so the water is winnowed with fine fillets of it. The growth is slow till it reaches the surface; then one or two leaves sprout from the surface, as though to head was to appear, for a long time, and, as if by magic, rise up "to explain," then grow very rapidly till in blossom. It seeds quickly (1st to middle of Sept.), and falls while soft and green into the water, if standing in it. There is much of it at this time of year with no water around it. It whips off easily the first strong winds.

There is something about it I propose to still further investigate. Ten years ago in our marsh there were for years hundreds of acres of open bays where no rice grew. Our or five years ago it came up in places so thick so that you could get through with a duck skin. It grew rank and strong for

Philadelphia, Oct. 29.—Where are the detectives of the New

ONTARIO—*St. David's, Oct. 25.*—"I have not seen game so scarce in years here as it is this season, although I am a cock wren in my mind, and I say, oh, where are the partridges? I used to run across through the August cock shooting. Rabbits are, however, plentiful, but, alas! beagles I have none. St. David's, where I now write from, is five miles from Niagara Falls and two miles from Queenston Heights. I give you this geographical information so that you may not wear out your spectacles looking for the place on the map, on which it appears in extremely small print. W. W. B.

—One day in a railway carriage two hunters began to quarrel. The quarrel in time took such proportions that nothing was left for the belligerents but to fight a duel. It was decided that the weapons should be rifles. On arriving upon the ground the adversaries were placed and the word given to fire. At that instant a hare, attempting to pass, fell struck with two balls! Thus two men escaped death by a single hare.—*Author unknown.*

Ties of eight—On account of darkness, it was decided to toss for fourth and fifth prizes. A. McGregor won fourth prize, single pickle cruet; W. J. Taylor, won fifth, five dollars' worth of cigars. Mr. R. Wilson killed 7 birds, and secured the sixth prize, a large ham.

for argument's sake an erroneous award in this case we consider a precedent of changing a decision a very bad one. In this case it was especially unfortunate, for it was the first decision of the meeting that had been openly announced to the whole field. We consider re-judging should be discouraged by all those who do not wish to see our trials and shows turned into beer gardens simply because Mr. Smith or Mr. Robinson thinks he has been aggrieved. Up to this time there never was a set of judges in America who had shown themselves more competent to judge or had greater confidence from every one present. Next morning the brace and handlers were on the ground, but as we state further on the rain prevented the running of the trials on Thursday Mr. Fischer came on to Manheim from Harrisburg, and in the afternoon was obliged to return home, and his son decided to go with him and take the dog. Just before entering the cars Mr. Seiler was informed that the judges had again reversed their decision, and that his dog had been awarded the heat, and Mr. Hendricks was told that King Dash would be permitted to run for second and the money. These are the simple facts of the case as they occurred, and as the committee of points which was determined not to make public the score of the trials, we consider should have been done, we refrain from criticising it as it was not handed to us officially. In conclusion we will say, that though it is a matter of great regret that anything should have occurred to mar the pleasure of the meeting, yet it is no surprise to us that errors should occur as long as our Field Trial rules remained couched in the language in which they are presented. We cannot do better, therefore, than quote from our editorial remarks in FOREST AND STREAM of September 2. Had our words of warning been heeded this occurrence would never have happened.

No laws for competitions of this kind can be too fully or plainly expressed. They should be explicit and admit of no misconstruction. The success of every enterprise depends upon the straightforwardness and intelligence by which it is run. Indefinite rules, framed carelessly, even by inadvertence, are liable to be twisted by interested parties, and the result is a mean trial of the spirit of what is intended. Dissension and civil rule the true spirit of the pleasures, and disgust all men of gentlemanly instincts. Whenever competitions of all kinds take place there have been since the world began men who cannot take a beating in a many way. They should be clearly given, and it will cause the gentlemen who accept the onerous office much trouble if they are not.

Of course there are objections to framing rules for running dogs mechanically, but we believe all the field trial rules which we have seen can be made more explicit. Field Trials are as yet but young in this country, and there are always present more or less persons for the first time whose interest can be secured by placing the matter before them in a simple way, which they can understand. As they now stand it would take a Philadelphia lawyer to interpret them, and he might find himself sorely tried.

To resume, Mr. McConnell's Lady Laverack and Mr. Isaac Yearseley's Little Lady were called, and as the former did not respond, Doctor, belonging to G. B. McLane, Pittsburg, Pa., handled by Wm. Seager and Biddle by T. W. Ferrisburgh, were slipped. Across the field Doctor went like a flash, showing himself a merry going dog of good speed. He soon brought up standing on a cat, and Biddle ran in from across the meadow refusing to back. Both dogs were under good command, but Doctor left his own way from the start, showing a good notion how to quarter his ground. The little spongy gully in a cornfield Doctor straightened himself out, and after drawing a few steps on, pointed in excellent style. The birds were flushed by the gun, and two were killed by one discharge. Owing to the fault of his handler, who should have signaled him, Doctor backed, shot and retrieved one bird, and the other fairly at command. Doctor, further on in a springy glade, made a false point, but went on. He then ran down wind in a rag grass field, flushed one bird, and in quartering back came to a point on the bevy as it jumped. In the same field Doctor roared and pointed where birds had been running, Biddle moved up and shared the point, refusing to back. Doctor then flushed. Biddle then nosed a bird up which she should have pointed, and the gun was shot at her. It had grown quite dark, and a move was made to the rail station, and 8:30 p. m. saw the party back at the Stevens House at Lancaster.

TUESDAY, OCTOBER 28.

Although rain was falling quite heavily, an early start was made at 7:50 a. m. for Manheim, and as the weather did not clear, the party returned to Lancaster by the 1 p. m. train. In the afternoon was devoted to visiting Mr. C. S. Miley's large kennel of dogs and a call upon Mr. Vondersmith, whom we found away from home. On our way back to the hotel we were met by Mr. F. A. Diffenderfer, who invited us to look at his kennel. There we found his two first-class bitches, Leah, Roybell-Livy II., and Arndia, Leicester-Pocolontas, and two very likely puppies by Roscoe out of Arndia.

FRIDAY, OCTOBER 29.

In spite of a dripping morning, with the whole country shrouded in a fog, the 7:50 a. m. train was taken for Manheim station. The start was as cheerless a one as it is possible to conceive, the judges and the majority of spectators had donned their rubber coats, and the air had a lissle look about it. The ground was so wet that the dogs had a lissle trouble in getting to the line, except when shaking the water from their coats. The ground being reached, the same where the running ended on Wednesday evening, it was found that Diffenderfer's Leah and McConnell's Lady Laverack had been withdrawn, and that Shuster's Cornelia had failed to put in an appearance. This brought Stayton's Belton III., and Yearseley's Little Lady together, May Laverack having the bye. Belton was handled by H. M. Short, and Little Lady by her owner. The dogs were slipped at ten o'clock in the rag-wet field above the glade. Both dogs were off like the wind, the little bitch being a stylish and rapid dog, and Belton nothing at all to his work. At the lower end of the field Belton pointed to a good sized bevy, which flushed as the gun came up, not lying well on the cold and wet limestone chippings. The bevy dropped apparently in the bottom. On the other side of the bottom, in some woods, Belton, who was under good command, pointed in some long grass and stood very staunchly in an awkward position. Lady was called up to back, and Belton settled down on his point. Lady refused to back, and passed between Belton and the bird, and circling round him. The gun was ordered to flush and kill. Belton did not drop promptly to shot, but retrieved the bird in style and was awarded the heat.

Mr. Brown's Dash, winner of first heat in the stakes, and Mr. Snellenburg's May Laverack, who had a bye, were then run together, both dogs being unavoidably handled by H. M. Short. The dogs were given a spin in the bottom, and then ordered back into the woods, which was drawn blank. May

showed up at once as a very speedy bitch, but Dash seemed stale. He began by flushing a bird in the bottom, but dropped well to wing. The dogs were out in some time, they alders along a little stream, where the bird had been marked, and where it was impossible to see the dogs at work. The bird was flushed presumably by Dash. It was marked down in a corn lot, but both dogs failed to make it out. The bird was then trodden upon by a spectator, and May pointed where it had been moved. Dash pointed the bird in the alders under a mass of drift stuff, and when the gun came up, jumped in and caught it. The glade was followed up into a ravine, and many fields of grass and rag-wet were drawn blank. The party then adjourned to a barn and partook of an excellent luncheon, which had been sent on by mine host, Mr. A. Hiesland, of the Stevens House. On resuming, Dash made an uncertain point in the first field of the morning, and May went in and flushed. It was a bad day to work any dog. There was but little air stirring, and that from the east; everything reeked with dampness. After the dogs had been down over three hours, the judges, who had been working unflinchingly for a result, asked the representative of the owner of Dash and Mr. Snellenburg if they would be content with a decision as the score stood at that time. It was agreed to, and May was awarded the heat. It may be said that Short handled both dogs with great fairness, and the owners cannot be otherwise than satisfied with the decision.

The next brace run was Snellenburg's Thunder, handled by his owner, and McLane's Doctor, handled by Wm. Seager. Thunder showed the same good ranging and quartering qualities as on the first day. He is an excellent dog, and we believe the first pure Laverack ever run in an American field trial. After a vast range of ground had been drawn blank, a meeting was called on the ground of members of the association and contestants. Mr. Stayton, secretary of the P. S. F. Assoc'n, offered a resolution, as follows: "That on account of the scarcity of birds, the unpromising weather and the closing hours of the last day of the trials, it being impossible to run them off, the first prize of \$100 in the All-aged Stakes should be equally divided among those dogs remaining in the stakes." The motion was seconded by Mr. Diffenderfer, and then put to a vote, which was carried unanimously, the following gentlemen voting in the affirmative: Messrs. Snellenburg, Stayton, Yearseley, Seager, Hendricks, Diffenderfer, Farrington and McConnell.

Division of First Prize. \$20 each—Thunder, Button, May Laverack, Doctor and Belton.

Division of Second and Third Prizes, \$10.71 each—Pat II., Biddle, Brown's Dash, Countess, Roxey, Little Lady and King Dash.

Withdrawals—Lady Laverack, Leah and Seiler's Dash. Absent—Cornelia and Minerva.

Upon returning to Lancaster a meeting was held, and it was decided by the committee to pool the prizes in each of the Puppy and Nursery Stakes, and the divisions were made as follows: Puppy Stakes, \$9 each—Bess, Little Lady, Mack, Dick Laverack, Daisy Laverack, May Laverack, Count, Lady Laverack, Roxey Boy and Abby W. Absent—Dart, Bob and Ned. Nursery Stakes, \$22.50—Dolly Edwin, Stuart, Fie Laverack and Lord of Charming. It was also decided to tender to the gentlemen of the association the return of their entrance fee of \$10, and to offer the return of the donation prizes to Messrs. James E. Caldwell & Co., of Philadelphia, and Mr. T. G. Conway, of New York.

The party then met at supper for the last time, and the evening trains going both East and West carried the judges, contestants and visitors to their respective homes.

We desire to return thanks to the local press of Lancaster for many courtesies extended to us during our stay in that city.

PENNSYLVANIA STATE FIELD TRIALS ASSOCIATION.

THE annual meeting of this organization was held on Tuesday, October 26, at 8:30 p. m., the evening of the first day of the trials, at the Stevens House, Lancaster, Pa. J. Palmer O'Neil, President, in the chair. The minutes of the previous meeting were read and adopted, the Secretary's report read and that of the Treasurer, which showed a balance on hand of \$142.45 obtained from membership dues, entrance fees and donations. The President then rose and stated that as the FOREST AND STREAM had written the organization to know the reason why the National American Kennel Club's Field Trials rules had been somewhat altered by the Pennsylvania Association, he deemed an explanation at that time but not possible. He had taken the liberty of changing the running rules, because the National Trials were run in the West on large prairies, where pace and ranging were of more importance than on the inclosed farm lands of Pennsylvania. He had, therefore, taken five from pace and one from ranging, and added two points each to staunchness, quartering and obedience and disposition. Slight changes had also been made in the negative points for demerits which were found to be expedient.

The meeting then proceeded to the election of officers with the following result: President, J. Palmer O'Neil, Pittsburg, Pa. (re-elected); First Vice-President, Samuel G. Dixon, Phila. (re-elected); Second Vice-President, Samuel S. Brown, Pittsburgh, Pa.; Treasurer, Frank A. Diffenderfer, Lancaster, Pa. (re-elected); Secretary, I. R. Stayton, 67 Fourth Avenue, Pittsburgh, Pa. (re-elected). Executive Committee—B. F. Dorrance, Wilkesbarre, Pa.; William A. McIntosh, Pittsburgh, Pa.; S. S. D. Thompson, Pittsburgh, Pa.; Edward Gregg, Pittsburgh, Pa. (all re-elected); Richard G. Wood, McKeesport, Pa., and Dr. Robert Huey, Phila.

The following gentlemen were then elected members of the Association: J. W. Orth, Pittsburgh, Pa.; James O. H. Denny, Ligonier, Pa.; William James McCrickart, Edgewood, Pa.; R. J. Wood, McKeesport, Pa.; B. J. McClure, Lancaster, Pa.; J. B. McCasby, Lancaster, Pa.; W. B. Hall, Lancaster, Pa.; T. S. Thompson, Thompsonstown, Pa., and Dr. S. T. Davis, Lancaster, Pa. It was then voted that the three judges, Major J. M. Taylor, B. F. Wilson and Washington A. Coster, Dr. R. Rowe and F. Satterthwaite, of the Pennsylv. Exp. Assoc., be made honorary members.

Mr. Diffenderfer then expressed his regret at the scarcity of birds, which had been such a drawback to the day's sport. He had been promised by a man of influence residing at Quarryville, who was a brother member with himself of the Lancaster County Game Protective Association, that the grounds should be strictly preserved for the trials, but that he had learned from two sources of information that the party had broken faith with him, and that the birds had been shot

at since the opening of the season. Alderman A. K. Spurr, President of the County Association, corroborated this statement, and said that he felt aggrieved; that the man referred to had not only allowed his friends to shoot over the grounds but had done so himself, that Mr. Diffenderfer had drawn the grounds before the open season, and had found birds in large numbers on the beat, and that he was promised they should be left unmolested. A change of base was then decided upon and the burrough of Manheim, ten miles north of Lancaster, was selected as the locality in which to continue the trials.

While the meeting was in progress the Pennsylvania Association, received a telegram from W. A. Dunshaw, President of the McKeesport Game Protective Association, offering their preserve of thirty-five hundred acres for next year's trials. The President was authorized to appoint a committee to select the location for next year's trials.

A vote of thanks was tendered to Messrs. James E. Caldwell & Co., of Philadelphia, for their donation of a prize in the shape of a solid silver cup, and to Mr. T. G. Conway, of New York, for the donation of a handsome gold and silver mounted revolver.

After a lively discussion on the practicability of allowing non-residents of the State to contest in the future, on which nothing was done, the meeting adjourned.

COCKER SPANIELS.

CHICAGO, Oct. 25.

Editor Forest and Stream:

In your last issue appeared an article under the heading of "Modern Cocker Spaniels," from Mr. A. C. Waddell, of Topeka, Kansas. This article was brought out, no doubt, by the very laudable request of G. J. D. McDougall to breeders of this strain of spaniels to give their views of the type of the modern cocker, that some definite standard might be agreed on by which to judge the breed at bench shows in this country. "Stonehenge's" standard, to some whose breed did not correspond with it, not being satisfactory. "Idstone," in his work on the dog, says: "The forms and colors of cockers are all matters of fancy and fashion, but I may caution those who desire to have them that they must not expect a very great amount of work from them unless they are of adequate size." "Stonehenge" says: "The title 'cocker' includes every variety of field spaniel except the Sussex and Clumber." Now to whom are we to refer as to what the modern cocker is or should be? Shall it be to Mr. Waddell or to such well known authority as "Stonehenge?" For one, knowing how Mr. Waddell's dogs are bred, I should prefer the former.

I beg to correct one statement he makes: "To call such dogs as Whitman's cockers is a farce; they are merely bad, some English spaniels. I am opposed to cockers running over twenty-five pounds, and when Mr. Whitman exhibited his at St. Louis—liver and whites that would run near to, if not quite, forty pounds—I said English field spaniels, or, as some call them, English water spaniels."

Now, the first cockers I exhibited at St. Louis, liver and white, were the dog Dixie and bitch Dixie—both I considered quite handsome and good. They both won first prize in their respective class, and were neither of them over twenty-five pounds. They were placed first over a very nice pair of the Bestor strain, which were considered larger; still, I think no good judge would call them English water spaniels. At the next show given in St. Louis the standard under which cockers or field spaniels were to be judged was "Stonehenge's," which says: "The title 'cocker' includes every kind of field spaniel except the Sussex and Clumber." Under that standard, I entered Carlo, a liver and white dog, under thirty pounds, perfectly made, and a well-broken, undeniably good worker. He won first prize. I also entered a liver and white bitch, heavy with pup, but I do not think she would weigh as she was over thirty-five pounds. Under the standard she should have won second, but the judges, who did not seem to be posted on what a spaniel should be, gave second to Mr. Waddell's liver and tan dog, which, I think, he will not deny is one-half King Charles, and that his sire was owned in Chicago. He says he entered his Josie in the King Charles class, and won the prize—reason for complaint. If he knew she was not a King Charles, why did he enter her in that class? Was he afraid she would not win in the class where she by right belonged? I leave it with you to judge.

With regard to size of cockers owned by me, I will say I have not a bitch that will to-day weigh twenty-five pounds. They are what I consider a trifle under size, and I bred them to Carlo, producing stock that will run from twenty-three to twenty-eight pounds. Their usefulness overbalances all other attainments, so Mr. Waddell tells us, and as mine are not bred as above for parlor pets, I think I have struck the happy medium for usefulness.

J. H. W.

NOTES FROM FOREIGN EXCHANGES.—The Royal Society for the Prevention of Cruelty to Animals, of London, England, October 14, had one James Smith, a dog dealer, arrested for biting off the tails of five King Charles spaniels. Mr. Catral, a member of the College of Veterinary Surgeons, testified to having examined the dogs, and found that inflammation had set in. He looked upon the biting off of the tails as an operation both painful and unnecessary, as part of the spinal marrow would be taken away, and that at the expense of a terrific nervous shock. He further stated that he had never heard that it cured dislimp, and that the act was one of cruelty. The defense set up a plea of general custom, and that the operation was performed on thousands of fox terriers. Alderman Sir Thomas Gabriel, in giving his decision, said that though the charge was one of cruelty, no one could suppose that it was wilful, or that a man would injure his own property, and fined the defendant the nominal fine of one shilling and costs. The editor of the Field remarks as follows: "The statement in evidence that 'part of the spinal marrow is taken away' is contrary to fact. The spinal marrow does not extend even to the root of the tail, and it is only the bodies of the vertebrae (without any cord for the nerves, or neural canal) that enter into the formation of the organ. Still there is no necessity whatever for biting off the end of the tail, seeing that it can be removed in a much more painless way by the knife."

Mr. Macdonia has lost his pointer bitch, Dido, who was doubly valuable to her owner, as she was the only daughter of Garth's Drake in his possession. She, however, leaves behind her three pups, Drummer Boy, Desdemona and Dulcimer, by Lord Seton's Drake, by Sam, out of Lord Seton's Morn.

The Goathland farmers have been amusing themselves with racing hounds under the following conditions: A trait

Archery.

PRIVATE PRACTICE CLUB.

SEPTEMBER SCORES.

THE shooting of the members of this club during September shows but few remarkable features, although a general tendency toward the shorter ranges is perceptible as the hours of practice shorten with the days. During the winter months there will be a few members, no doubt, who will have the hardihood to shoot the "York round" despite the snow and bitter winds, but most of the members will doubtless be content with sixty-yards shooting in halls, and leave the long ranges for next May. We trust that enough may cling to the outdoor practice to give us a comparison next spring between those who have practiced only at short-range, and those who have had even limited practice at the longer ranges of the York round. Among the notable performances of the month of September, the score of 45 hits, 261 points, made by Mr. Maurice Thompson on the 30th, stands pre-eminent. Unquestionably this is the greatest feat at the 80-yards range yet accomplished in America, and few instances are recorded in English archery annals where it has been exceeded.

The most beautiful record throughout the month was made by Mr. Frank H. Walworth, of Saratoga Springs. This archer, who is of only one season's experience, has at once pressed to the front rank of American archers, and bids fair to bear away the champion medal for the coming year. His 60-yards shooting is now better than that of any living magnate of England's archery, and it is doubtful if his equal can be found in America. Shooting 29 scores of 24 arrows each, he only fell below 100 points in a single instance, and ten times scored 24 hits. His average was above 120 points. This is admirable work. At 80 yards he got a splendid average, and only at 100 yards is he yet weak. His score of 416 at the single York is a record of which he should be proud.

Steady and beautiful shooting by Prof. T. R. Willard encourages the hope that we may see the "lone archer" as a competitor in the front rank at the next National. No progress could be more sure and satisfactory than this member has shown, his double York round of 157-703, scored on the 21st and 22d, being only a trifle above his average for the month. All honor to the "lone archer" who proposes to defy the wild weather of the prairie winter in pursuit of his solitary practice!

A new and welcome face appears this month, new to the Private Practice Club, though not new to archery. It is a pleasant duty to record the name of Mr. Brackett among the members of the club, and the score recorded at the single York opposite his name of 76-352 is one of the notable things of the month.

Mr. Hyatt, though an old acquaintance, comes newly among us, and every member will rejoice to greet him. He enters the arena with twenty York rounds as tokens of his prowess, and not a single additional score at the short ranges. Well done! Welcome!

Our good friend, De Graft, shows marked improvement this month. Sorry, however, to see that he has left the *Charm*!

Some of our familiar names are absent. What has become of Peddinghaus? Of old we leaned upon him for our good scores. Surely he has not forsaken us! And Hussey, and L. D. Edwin, and Jesse Deval, where are they?

CLASS I.

E. B. Weston, Highland Park, Ill.

September 13.	100 yds.	80 yds.	60 yds.	Total.
" 14.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

Will. H. Thompson, Crawfordville, Ind.

York Rounds.				
	100 yds.	80 yds.	60 yds.	Total.
September 20.....	25,101.	38,168.	22,120.	85,389.
" 21.....	25,151.	38,166.	22,120.	85,437.
" 22.....	45,179.	39,163.	23,125.	107,467.
45 arrows at 80 yards.	56,158	55,163	29,171	58,175
44,204	44,204	44,204	44,204	44,209.
24 arrows at 60 yards.				
24,175	25,141	22,134	21,146	23,119
24,118	23,125	22,136	21,117	23,131
24,112	23,127.	22,136	21,122	23,124
Average York rounds.....433 2-3				
Average 80 yards.....175 2-3				
Average 60 yards.....63 23 29				

Maurice Thompson, Crawfordville, Ind.

September 8.	100 yds.	80 yds.	60 yds.	Total.
" 14.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

Frank H. Walworth, Saratoga Springs, N. Y.

September 3.	100 yds.	80 yds.	60 yds.	Total.
" 6.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

Foster H. Brackett, Boston, Mass.

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

T. A. Willard, Galesburg, Ill.

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

F. O. Hyatt, Cortland, N. Y.

September 3.	100 yds.	80 yds.	60 yds.	Total.
" 6.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

C. C. Moore, Sugar Spring, N. Y.

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

Parns & De Graft, Charlotte, Mich.

September 14.	100 yds.	80 yds.	60 yds.	Total.
" 15.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

E. T. Church, Charlotte, Mich.

September 14.	100 yds.	80 yds.	60 yds.	Total.
" 15.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

M. D. Ewell, South Ryanston, Ill.

September 6.	100 yds.	80 yds.	60 yds.	Total.
" 7.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

W. Holberton, Hackensack, N. J.

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

Howard Fry, Williamsport, Penn.

September 2.	100 yds.	80 yds.	60 yds.	Total.
" 3.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

WILL H. THOMPSON, Sec.

September 1.	100 yds.	80 yds.	60 yds.	Total.
" 2.	15, 63	21, 67	21, 69	82, 219
24 arrows at 60 yards.				21, 69
20, 84	22, 66	17, 75	15, 72	13, 71
16, 59	22, 66	17, 75	15, 72	13, 71
11, 67	9, 29	13, 37	14, 40	18, 45
Average York round.	216	Average 80 yards.	79	
Average York round.	69 1/2	Average 60 yards.	63 23 29	

This was the only match which was shot by these clubs, although the Toxophilites subsequently shot two scores in pursuance of an understanding with the North Side Club, but the latter club were prevented from shooting by the weather, or the absence of some of the members of their teams. I send the scores simply as a record of the shooting of the Toxophilites. First score, shot August 14, 1880, was as follows:

First Score, shot August 14, 1880.	100 yds.	80 yds.	60 yds.	Total.
F. Sidway.	23, 117	22, 126	21, 99	23, 123
W. N. Granger.	24, 102	24, 96	21, 112	24, 104
H. S. Parker.	23, 112	21, 99	19, 95	21, 101
E. L. Parker.	22, 96	23, 107	22, 106	19, 81
S. S. Spaulding.	17, 99	19, 103	17, 63	18, 74
Total.				457, 2,603

Second score, shot September 24, 1880:

Second score, shot September 24, 1880.	100 yds.	80 yds.	60 yds.	Total.
S. S. Spaulding.	22, 102	24, 122	24, 126	23, 123
W. N. Granger.	24, 102	24, 96	21, 112	24, 104
H. S. Parker.	23, 112	21, 99	19, 95	21, 101
E. L. Parker.	22, 96	23, 107	22, 106	19, 81
S. S. Spaulding.	17, 99	19, 103	17, 63	18, 74
Total.				457, 2,603

Respectfully yours, FRANK SIDWAY, President Toxophilites, Danfalo, N. Y.

NEW YORK ARCHERY CLUB, October 30.—At the annual meeting of this club, Oct. 27, the following officers were chosen for one year: President, Dr. A. B. De Luna; Vice-President, Mrs. A. L. Hill; Secretary, S. S. Roper, 82 William street; Assistant Secretary, Miss L. S. Bailey; Treasurer, Dr. H. T. Elliott; Assistant Treasurer, Wm. N. Frazer; Captain, Dr. M. McLean. Executive Committee—G. H. Sheldon, Geo. D. Pond, A. L. Hill, Mrs. A. B. De Luna, Miss E. T. Morton.

AURORA VS. AUBURN.—Match shot Oct. 16 between the Random Archery Club, of Aurora, N. Y., and the Auburn Archery Club, of Auburn, N. Y.; sixty arrows each; ladies, 30 yds.; gentlemen, 40 yds. The complete score is appended:

Random Club.	1st Round.	2d Round.	Total.
Miss K. Bogart.	129	138	267
Mrs. T. Deland.	123	161	284
Mrs. E. L. French.	82	85	167
Mrs. Henry A. Morgan.	121	97	218
Mrs. N. L. Zabinski.	165	138	303
T. Deland.	83	81	164
Prof. F. Brown.	160	150	310
Mr. Hale.	24	28	52
Mr. Lovett.	134	89	223
M. L. Zabinski.	136	116	252
Total.	1,187	1,063	2,250

Auburn Club.

Auburn Club.	1st Round.	2d Round.	Total.
Mrs. S. Saunders.	101	154	255
Mrs. F. H. Griswold.	161	136	297
Miss L. Pomeroy.	78	96	174
Miss Nellie Seward.	87	111	198
Miss C. Fougate.	76	62	138
C. E. Thorne.	56	100	156
W. R. Hopkins, Jr.	152	145	297
W. R. Hopkins.	140	124	264
J. D. Teller.	48	111	159
D. M. Dunning.	48	61	109
Total.	997	1,030	2,027

Majority for Random Club, 243.

PUBLISHER'S DEPARTMENT.

—Hop Bitters has restored to sobriety and health, perfect weeks from intemperance.

—The Holbad Shooting and Fishing Snits. Uptlegrove & McCellan, sole manufacturers, Valparaiso, Ind. Send for circular.

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A HAPPY RESTORATION.—I can truly say that I owe my present existence and happy restoration to the hopes and joys of life, to the use of Warner's Safe Kidney and Liver Cure, and I say to every one suffering from any manner of kidney or liver trouble, "Use this remedy and recover."

W. E. SANFORD.

Holly, N. Y., Feb. 25, 1880.

If you want to buy a W. & C. Scott & Sons' breech-loader cheap, call at C. L. Ritzman's, 943 Broadway, near Twenty-third street. Sixteen and twenty boxes of these celebrated makers from \$75.00 and upward, also handmills 10, 12, 16 and 20 boxes on hand. A 10 and 12 box, second-hand, Scott now on hand. Call soon, as they go as fast as they come. An English gun with all improvements, including extension rib, patent forend, etc., from \$40.00 upward (warranted in every way). Don't forget address, C. L. Ritzman, 943 Broadway.

Answers to Correspondents.

—No Notice taken of Anonymous Communications.

A. J. S., Ripley, Ohio.—Please give the name of the enclosed bird. It is a sora rail (*Porzana carolina*).

H. C. F., New York.—You can examine the gun by calling at any of the large gun stores advertised in our columns.

E. A. P., Sackett's Harbor, N. Y.—You will find either one of the two

J. D., Dayton, O.—The best book on training hunting dogs is "Hutchinson on Dog Breeding." Vero Shaw's "Illustrated Book of the Dog" is one that should be in the hands of every dog man. We can furnish numbers already published.

J. W. E., Pottstown, Pa.—My dog is very constipated. What shall I do for him? Ans. Want of exercise and absence of proper food are the principal causes. Give sulphur—one teaspoonful—with food once a day for a week, and give two doses of castor oil three days apart twice.

J. P. W., South Orange, N. J.—The fore-feet of my setter bitch, six months old, seem to be out of joint, or rather out of shape. She seems to be bow-legged. What is the matter and what can I do for her? Ans. The dog has been improperly confined. All young dogs should have their freedom. Chaining young dogs up will get them out of shape, and kennelling puppies in barrels will crook their legs. There is nothing to be done.

H. R. P., Gambier, Ohio.—I have a puppy ten months old, half Gordon and half Black Russian. In June last he got the St. Anthony's dance. Shall I use a battery? Ans. The puppy has chlores, or St. Vitus' dance. We have heard of St. Anthony's fire, but not of his dance. The battery would probably do more harm than good. Give six vicia one-eighth of one grain and two grains of quinine made in pill three times a day. Gentle exercise in open air and careful diet may in time bring about the desired result.

T. E. L., New York City.—My dog, a large mastiff, has cancer within his ear. The crevices are discolored by a black discharge, and the dog frequently shakes and scratches his ear. You were kind enough to give a most valuable remedy for the mange; may I ask you to add to the obligation by prescribing for this trouble? Ans. Remove all dirt and hardened wax by careful washing or syringing of the ears with lukewarm water. If the wax is hardened it can be removed by pouring in a few drops of olive oil. The following preparation should then be applied: Goulard's extract of lead, one ounce; glycerine and carbolic acid, one-quarter ounce; flax oil oil, four and a half ounces. Mix the two first named, and add the oil gently, rubbing them in a mortar. The bottle must be shaken before the liniment is used.

C. S., Coleville, Pa.—We were talking about game birds in our store the other night in regard to quail (Bob White), partridges and pheasants. F. claims quail and partridges are the same and S. claims they are three distinct birds. Which is right? The discussion arose from reading the game laws of Pa., where it read partridge or quail. He said it was two names for one bird. Ans. Partridge and quail are local names applied in different sections to different birds. The partridge of Virginia is the quail of New York and Connecticut, while the partridge of New England is the "pheasant" of Pennsylvania and the South. In many parts of Pennsylvania the terms quail and partridge are indiscriminately applied to the Bob White (*Oryz virginianus*). In New England, however, the quail is Bob White and the partridge the ruffed grouse.

A CONSTANT READER.—My Gordon setter is in good condition and seemingly healthy. He has a watery discharge at the eyes, which is particularly noticeable in the morning. He is three years old. My pointer, same age, is similarly afflicted, as is also my young pointer, fourteen months old. The latter dog was very sick with distemper, which ended in the formation of a kind of tumor, which discharged a quantity of matter and then healed. This was three months ago, since then I have found it difficult to fatten him. What shall I do for my dogs? Ans. The two first dogs referred to, if fat, caused from over-feeding, you can improve by giving limited amount of food and regular exercise. Wash lightly once a day with Goulard extract, one drachm, and one ounce of water mixed together. Small doses of sulphur will also be found beneficial. To fatten your young pointer, add meat with the meal and feed three times a day.

H. S., Troy, N. Y.—I have a black and tan dog, ten months old. About two weeks ago the inside of his mouth, and outside under his lower jaw, became very much inflamed and sore, causing him to rub and irritate it. I treated him by rubbing his mouth with borax water, which entirely healed it, but after a day or so I noticed he was very sore about his throat, and then I found that outside there was a sore about the size of a silver dollar. The hair has fallen out, and he is constantly rubbing it, and he can hardly swallow his food. His nose is quite dry, and there is a slight discharge from the eyes. I also have a setter puppy, four

months old, strong and healthy, but when she is excited she cannot retain her urine. Ans. The probability is that there has been inflammation of some one or more of the glands situated under the jaw, in which case a laxative, or some simple ointment, such as two ounces of lard mixed with a teaspoonful of tar, will afford relief. 2. As the little bitch grows older she will become free from the trouble you speak of. The less you intimidate her the better.

F. B. S., Elizabeth, N. J.—Will you please tell me what to do for a bound aged four years who has been troubled since December last with a running from one eye. I think he hurt it when hunting in the brush. There is a small spot about the size of the head of a pin on the dark part of the eyeball, from which a yellowish white matter is discharged. When the eye is washed he can for a short time see with it, but it soon fills up again. At the time of the injury the eye did not swell, but was very much inflamed. At the present time, however, the inflammation seems to have disappeared, but the eye is covered at all times with the thick yellowish matter. Ans. You have allowed ten months to elapse before attending to your dog. There are too many sportsmen like yourself, who, at the ending of the season, neglect their dogs until the beginning of the next. Such an injury as probably exists is of too delicate a nature to be prescribed for without seeing the dog. We would suggest that you show him to a competent surgeon. John Dancier, Central Hotel, Orange, N. J., is one whom we can recommend. The trouble you speak of may be one of two kinds. For example, if inflammation of the cornea exists very careful and unobtrusive treatment is demanded. If on the other hand it is a small growth upon the cornea, a caustic, accurately applied, or calomel dusted upon it would be likely to remove it. In any case the eye should be kept clean with tepid water.

—One of the firm of John H. Pray, Sons & Co., wholesale and retail carpet dealers, Boston, Mass., is, or claims to be, a sportsman, and he will at all times take great pleasure in doing a favor for a fellow sportsman in want of any kind or grade of carpeting, rugs, etc., etc. Correspond with the house, or call and see him, and see if he means what he says.—*Adm.*

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GUN FOR SALE.—A NEW W. W. GREENDAY, double wedge fast, top snap, extension rib, pistol grip, 12 gauge. 23in. cylinder bore, 7 1/2 lbs., 2 1/2 in. drop; 14 stock; patent forerock—a beautifully finished and excellent shooting gun, at a sacrifice, and for no fault. Address M. P. MCKOON, Franklin, N. Y.

ANGLING LIBRARY FOR SALE.—An unusually large assembly of books on Angling and Sport, mainly English, collected by Mr. Jno. G. Fenell, numbering 232 titles, including many volumes of considerable rarity.

J. W. BOUTON, 26 Broadway, N. Y.
A printed list of the above may be had on application. Oct25,21

FOR SALE.—Breech-loading shot-gun, W. & C. Scott & Sons, 12 gauge, 23-inch barrel, 8 1/2 lbs. weight, 3 1/2 drop, pistol-grip. In fine condition. Cost \$150. Will sell for \$75, including pig-skin case and loading tools. F. B. FULLEN, Cambridge, Mass. Oct25,21

BARNEGAT SNEAK BOAT FOR SALE.—Model taken from N. H. Bishop's famous "Centennial Republic." For description and price address J. H. HUSTON, Canton, St. Law. Co., N. Y. Oct25,21

BICYCLE FOR SALE.—An English "Harvard" Roadster, 52-inch, double hollow fork, suspension saddle, etc. For price and full particulars address W. DE KHAM, 24 Fifth Avenue, N. Y. Nov4,21

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WANTED.—Second-hand breech-loading shot-gun. Must be in good condition and cheap for cash. Address with full particulars, W. B. SEARLS, P. O. Box 46, Patterson, New Jersey. Nov4,21

WANTED.—About Nov. 7, quail and duck shooting within 10 miles of city. Address, stating experience of guide and board for two or three weeks. JACK, P. O. Box 3,383, New York. Oct25,21

The Kennel.

BLUE RUIN IN THE STUD.

Pure Laverack—Carlowitz-Princess Nellie. Carlowitz is by Pilkington's Dash ex Llewellyn's Countess; Princess Nellie by Pride of the Border ex Champion Ferret. In the stud, Fee, \$25. Blue ruin is beautifully ticked with his own (blue) color, and is the handsomest Laverack dog ever bred by the late M. Von Cullis. For sale—Broken and unbroken dogs, bitches and whelps of Laverack, Llewellyn, Irish, Gordon and native bloods. State what you want and inclose stamp. E. & C. VON CULLIS, P. O. Box 215, Lakewood, Dover, Del. Oct14,21

FOX TERRIERS FOR SALE.—A fine young dog, nine months old, well marked, good bone and muscle. By my Rake II. Thoroughly broken by and now in the hands of W. Tallman, Brownville, R. I. In fine condition for fall shooting. Address, W. COFFIN, Providence, R. I. Oct21,21

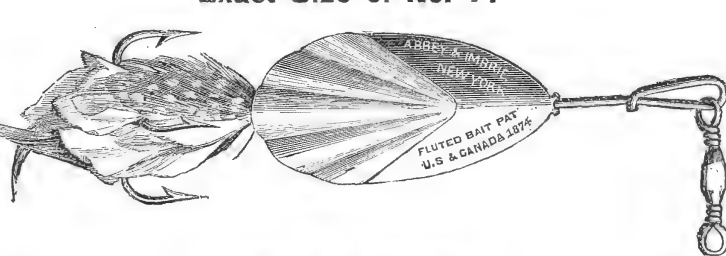
FOIL SALE.—Two years old white and lemon pointer Frank, bred by myself, out of Champion Bull by my Rake II. Thoroughly broken by and now in the hands of W. Tallman, Brownville, R. I. In fine condition for fall shooting. Address, W. COFFIN, Providence, R. I. Oct21,21

WILL SELL my native setter dog; broken handsome, eight; eighteen months old. Box 259, Fall River, Mass. Nov4,21

RED FOX, Skunk, Raccoon and other furs bought for cash—highest prices. Send for circular with full particulars. E. C. BOUGHTON, 5 Howard St., N. Y. Nov4,21

FOIL SALE CHEAP.—A thoroughly broken, finely bred English setter bitch. Three years old. Pedigree guaranteed. Sold for want of use. Address P. O. Box 184, New Bedford, Mass. Nov4,21

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THE SECOND ANNUAL MEETING OF THE EASTERN TRIALS CLUB, At Robin's Island, Peconic Bay, Long Island, N. Y. ON Nov. 29 and 30, and Dec. 1, 2, 3 and 4. OPEN TO THE WORLD. ALL-AGED STAKES.

Open to all Setters and Pointers. Limited to 50 entries. First Prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25; forfeit, \$15.

PUPPY STAKES.

Open to all Pointers and Setters under 18 months of age. Limited to 25 entries. First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, \$15. Entrance fee, \$15; forfeit \$10.

NURSERY STAKES.

Open to all Setters and Pointers under 12 months of age. Limited to 15 entries. First prize, \$50; second prize, \$40; third prize, \$20. Entrance fee, \$10; forfeit, \$7.50.

BRACE STAKES.

Open to all Setters and Pointers. Five braces to run or prizes to be scaled. First prize, \$250; second prize, \$125; third prize, \$50. Entrance fee, \$25; forfeit, \$15.

CLUB STAKES.

Open to members of the Club only; dogs to be owned and hunted by the members making the entry. Prize, a hundred dollar piece of plate, to be selected by the winner. Entrance, 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace Stakes, and entries close on Nov. 18th. Entries will be received for the open stakes up to mid-day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.

P. O. BOX 274, NEW YORK CITY.

Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

STUD FOX TERRIERS.—Royal (champion) Imp. P. Particulars sent by mail. Fee, \$15. Postscript (Imp.). Fee, \$10. Nailer (Imp.). Fee, \$10. P. O. Address, W. RUTHERFORD, Esq., 175 Second Ave., N. Y. Nov4,21

FOR SALE.—Black-breasted Reed and Golden P. Duckwing Grouse, and English Hens, Hounds, or will exchange for breech-loading shot-gun or ferrets. JOHN KNIGHT, Jersey, Lackawanna Co., Pa. Nov4,21

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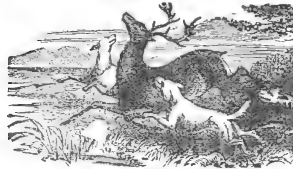
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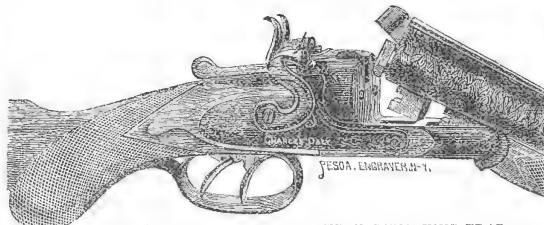
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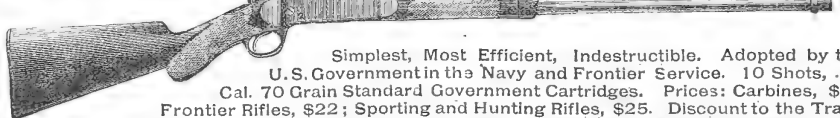
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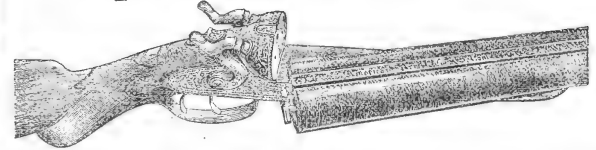
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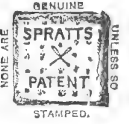
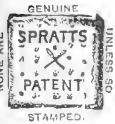
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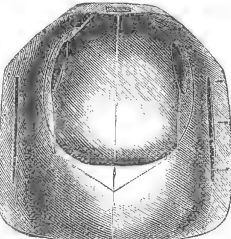


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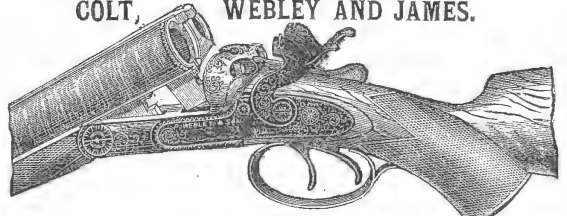
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FOREST AND STREAM.

NEW YORK, THURSDAY, NOVEMBER 11, 1880.

**THE FOREST AND STREAM goes to press Wednesdays. Correspondents are requested to mail their communications so that they may reach us before that day.*

THE NATIONAL AMERICAN FIELD TRIALS.—The trials to be run near Vincennes, Indiana, next week promise to be in all respects very successful. From what we learn of the arrangements it appears that everything which careful foresight could accomplish has been done to render the meeting attractive to sportsmen, and to make it what it should be, a field where the best dogs of America can contend without fear or favor.

Great credit is due to Dr. E. Kellum and Mr. Sloo for the vigorous work that they have done to promote the success of the meeting. We look forward with great interest to the result of the trials, and feel sure that this meeting will exceed in interest any hitherto held in this country.

BLUEFISH GOING SOUTH.—The bluefish, *Pomatomus saltatrix*, have left the Northern and Eastern coasts as far as New Jersey, and are now on their winter tour. They have settled the bills (of the young bill-fish) and with a young one under each fin (inside) they have departed from the shores of Long Island, like the last summer boarder, not to be seen again until next spring when the skipper of a menhaden steamer, standing in the prow of his piscivorous craft, erect as a sore thumb and with a north-east smile of satisfaction which expands until both ends of it can be seen behind, calls to the cook of his oleaginous ship: "Get out your squid. Sam, we'll have bluefish for dinner."

—We have received from the author an "Introduction to the Study of Mortuary Customs among the North American Indians," by Dr. H. C. Yarrow, an extended notice of which will be given next week.

A DEATH TRAP IN SHINNECOCK BAY.

THERE are now untold millions of fish, mostly young ones, which are shut in by the closing of Shinnecock Inlet, and which will die soon if not let out. The bay is situated upon the south side and near the eastern end of Long Island, opening southward into the Atlantic Ocean, and is the feeding and spawning ground of millions of fish. Its fishery interests are very large; probably two hundred men support their families from the bay fisheries, taking the different fish in their seasons, as bluefish, weakfish, sea bass, etc., in spring and summer, and crabs, eels and flat fish in winter. The bay is deeper than the Great South Bay, averaging about twelve feet, but its inlet is often filled up and stopped by the autumn storms, one of which closed it up about two months ago. Intelligent fishermen place the amount of young bluefish (snapping mackerel), weakfish, menhaden, porgies and sea bass of this season's hatch, now confined in the bay at many millions, while of the older fish there is also a great number, one of our informants saying that he recently saw ten acres of solid fish in one mass in the bay.

Learning these facts we recently visited the bay and found them confirmed by the professional fishermen of Quogue, Atlanticville, Good Ground and Southampton. In conversation with Mr. Wm. N. Lane, the well known host of the sportsman's resort at Good Ground, so famous for its duck and bay-bird shooting, he said that he would open the inlet at his own expense if allowed, but that there was a fine of \$25 and imprisonment for so doing. Astonished at learning that a man might be subjected to a criminal prosecution for doing so good and public spirited an act as Mr. Lane proposed to do, we made further inquiry and learned that at the last session of the Legislature of New York the Supervisors of the town were empowered to appoint two commissioners, who had power to locate an inlet to be dug at the expense of the town, and that it was unlawful for any one to make an inlet at any other place.

Two men have been appointed; one of them is a man who has no interest in the bay and who does not care if it is never opened, and the other has a hotel somewhere in the eastern part of the bay, where an inlet is not practicable, and he does not care to locate it elsewhere, and in the meantime the fish will die.

The death of the fish is not the worst evil. Many of them do not decay until warm weather, according to the fishermen, and then the waters are foul, a "slick" is formed on top from the oil, and this, flowing out at every tide, repels the spawning fish from entering next season to deposit their ova. This is a case which calls for immediate action, and if Shinnecock Bay is not opened during this month we hope that some way may be found to punish derelict commissioners to as great an extent as the law would inflict upon Mr. Lane or others who should offer to do this necessary work. The Legislature should be called upon to repeal such portion of the act as inflicts a penalty upon men who offer to remedy the effect of storms in closing this inlet. It seems to us not only unjust but outrageous. The strip of sandy beach which separates the Atlantic from the bay is from sixteen to seventy-five rods in width, narrowest near Good Ground, in the western part, where Mr. Lane's bay can open an inlet in twenty-four hours, and the fishermen at Atlanticville and Quogue, still west of that, say that one made there is more likely to stand than if made in the Eastern and wider part.

We call the attention of our public spirited Fish Commissioners to this grievance. They are stocking the waters with young fish and here are millions of fry, one-quarter grown, suffering to be let out to find their migrating fellows or to go to deeper waters and more congenial temperature, which will surely die in another month. We are aware that the Fish Commission are powerless in this matter, but call their attention to what they may see that they should be empowered to act, and act promptly, in a case of this kind. To dig such an inlet is a trifling matter, if legal restrictions are removed, for if a small ditch is made the tides will attend to finishing it, and we call on somebody to do something to save, not only the fish now living, but the spawning ground of a most valuable fishery from a pollution which will render it obnoxious to the fish next season.

TRAPPED BIRDS ON LONG ISLAND.

WE commend to the consideration of the sportsmen of this city and Brooklyn the communication published elsewhere respecting the illegal traffic in trapped birds, extensively carried on by the employees of the Long Island Railroad.

The writer of that letter tells us that on the occasion of his return from a recent shooting trip to Greenport, L. I., there being seven other gunners on the same train, the baggage master had in his possession more birds, which he had bought of the trappers at the stations along the line, than the eight sportsmen could show as the result of their day's shooting. He further avers that this was nothing unusual, but that the same thing has been going on day after day, and will probably continue so long as the supply of birds holds out.

The law on this point is explicit. Section XI. of the game statute reads:

No person shall, at any time or place within this State, take or kill any ruffed grouse, commonly called partridge, or any pinnated grouse, commonly called prairie chicken, or any spruce grouse, commonly called Canada partridge, or any quail, with any net, trap, or snare, or set any such net, trap or snare for the purpose of taking or killing any of such birds; nor shall any person willfully sell, expose for sale, or have in possession any of the said birds after the same have been so taken or killed. Any person violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and in addition thereto shall be liable to a penalty of \$10 for each bird so killed or had in possession. And it shall be lawful for any person to take or destroy any such nets, traps, or snares wherever found.

When sportsmen are accorded the privilege of shooting over certain premises on the one condition that they do "not disturb the boys' snares down in the field," and when these sportsmen—eight of them—after a day's tramp with gun and dog over the snare covered fields, come home bringing in a baggery bag of birds, while the baggage master on their train, who has confined his "sporting" to his baggage car sends his boy through the train to peddle to these sportsmen a couple of dozen brace of trapped birds the inference is plain that there is something exceedingly putrid in Denmark.

There ought not to be any hesitation or misapprehension about their duty by the organizations whose business it is to attend to this matter. If the trade in snared birds is carried on with the boldness allowed by our informant certainly no extraordinary detective skill is required to put the guilt just where it belongs, and the simplest way to go about the suppression of the traffic would be the arrest and prosecution of every baggage master, brakeman, news agent and stoker on the Long Island Railroad in whose possession the birds might be found.

This appears to us to be the simplest and most promising mode of procedure. When once the trade of the railroad employees is stopped, the trapper will find a poor market for his birds and little encouragement to pursue his practices. The efforts of the game associations ought to receive the cordial support of the Long Island Railroad managers, who owe it to their sportsmen patrons to stop the contemptible work of their employees. The ordinary rules of business ought to teach them that the patronage of the passengers who go over their road to and from the shooting districts is much more to them than the revenue accruing to their brakemen and baggage masters from their services as go-betweens for trappers and dealers. A general order from headquarters respecting this subject would be appreciated by the public. We are confident that if a committee of the Long Island Sportsmen's Association should confer with the railroad managers they would find the latter ready to further their endeavors to prevent the extermination of the game birds of Long Island.

HATCHING FLOATING EGGS.—We publish in another place a figure and description of a new hatching apparatus invented by Col. M. McDonald, Assistant to the U. S. Fish Commission and Fish Commissioner of Virginia. It is not patented, and is generously given to the fish culturists to use, if it so pleases them. An examination of it will show that it is on the principle of the conical hatchers, but reversed, the eggs of the cod having as strong a tendency to rise as those of the shad have to sink; and though there are several forms of apparatus which hatch cod eggs tolerably well, there was need of a better one, and certainly this new device of Col. McDonald's looked fair and worked well with beeswax imitations of eggs, which are about the specific gravity of codfish eggs. It may be that this is destined to work the same revolution in hatch-

ing floating eggs that the comes have in shad hatching, superseding other apparatus by reason of compactness and the facility with which they can be worked. We will watch for reports of its use this winter at Gloucester and other places where the cod will be hatched.

YARNS.

DARK clouds arose, about the time we did, to repulse the wooing kisses of the morning sun, and growing every moment more and more threatening, finally struck a mountain top and sprung a leak. Saint Switthin! how it rained! Golden showers for the corn, emerald for the grass, ruby for the clover. The wind howled dismally and forced his way into the parlor. He does not knock at your door as a gentleman would, and enter in a modest, unobtrusive manner, but he kicks the door open and stalks in like the rough rider that he is, overturning everything as though he were the boss and sole proprietor of the ranch.

A thoroughly bad day fills its proper place in the angler's calendar. It is put there partly to make the better ones more attractive by comparison. A whole season of superlatively perfect days would bring in its train a sort of contempt or perhaps unthankfulness; but sandwiching unlucky and unpleasant ones between adds infinitely to the charms of the perfect angling day, when the wind is just right, the ripple just high enough and the fish a-biting.

"This is one of my days," says Tyro, after breakfast has been disposed of, "and I expect, as you are all to be housed for a few hours, to hear Munchhausen outdone. Anglers can outdo the most famous story tellers of any other profession."

"How do you account for it, and why do you associate with men who have so little regard for probity?"

"It seems as though the rarified atmosphere up here has an expansive effect, and is conducive to exaggeration of fishing and hunting exploits. It not only braces up a man physically, but his conversation gets braced up, and sometimes so high and well sustained that a judge and jury would be deceived into accepting as truth his most inflated flight of fancy. I associate with them, trying by so doing to correct their bad habits."

"You are an ass, Tyro; but whether you inherited or achieved or had assinnity thrust upon you I am not prepared to say, but that you are an ass I do affirm."

"Well, now, Jack, all hard names aside, I have yet to meet the man who, as an angling historian, is strictly truthful. My experience is this: I care not how honest a man is in his business relations and his ordinary everyday transactions, that same man will tell things exactly as they are when he recounts his adventures by field or flood. To illustrate my position: I went fishing one day with a clergyman. We went to one of the fishing stations on Staten Island. We caught seven weakfish—"

"I don't believe you caught seven weakfish."

"Hear me out and then contradict me; but allow, for the sake of argument, that we did catch seven weakfish. When we came ashore we met a party who had been out nearly a week. They wanted some New York papers we had, and for which they gave us half a dozen more weakfish. That clergyman showed those fish as part of his catch. He did not, I will say to his credit, claim to have caught them. If his friends inferred that he did he was not going to disabuse their minds by telling things as they were and damaging his reputation as an angler. You are all the same. You all utter these little fibs with the most unblushing mendacity. You guard your reputations as skillful anglers more zealously than any other quality you may possess, and knowing this I take very little stock in fish stories. I never knew a man to exceed the mark. There are plenty of men whose words I would unhesitatingly accept in regard to anything but fishing, and on that subject I would not believe them under oath. Munchhausen tells few fish yarns because he knew that the guild of anglers were thoroughly competent to keep up their end, and would probably be able to grandly discount his most extravagant stories; and I admire and honor his judgment. He would prove in comparison the embodiment of strict veracity. You anglers lie artistically and grow to believe your own piscatorial falsehoods. It is blow, blow, brag, until the familiar quotation, "That's a fish story," has become a synonym for every improbable and impossible yarn you can spin. No angler lacks a brother angler's experience but he either pronounces it fishy, or proceeds to draw something still more wonderful from his own well-filled storehouse of fiction."

"There is a well-defined vein of spiteful jealousy running through your speech. You, Tyro, never had any luck fishing. That is known of all men. Your opportunities have been golden, but you never could take advantage of them. You are totally lacking in almost every qualification that the angler requires. You have no patience. You are excitable. You are mechanically clumsy and stupid. Put a rod in your hands and you are a pathetic picture of ignorance and awkwardness. You cannot learn to tie a decent knot. I have spent hours with you vainly endeavoring to teach you how to fasten your hooks, and yet you know to-day as little about it as a child. I gave you up years ago."

"Personal abuse is one thing and facts another. There was Barney Whistler, one of the most truthful men that ever lived. A friend asked him to substantiate a statement regarding some fishing excursion. 'Excuse me,' said Barney; 'you will have to swear to your own lies, for I have all I can

do to manage and remember my own.' You young fellows, however, are not half as bad as the old veterans. They are the most unconscionable old braggers in existence. Not, however, from any intentional tendency to falsehood, but from an unrestrained habit of harmless exaggeration that took possession of their souls, and through the lapse of ages has so thoroughly fortified its position that it is impossible to dislodge it. Theirs are genuine fish stories, to which they cling with barnacle tenacity. It does not take them long to make a bull-frog attain the proportions of an elephant. The fish they have caught are like Falstaff's men in buckram—exaggerated to an almost unlimited number. But these rusty old chroniclers can safely be consigned to the category of 'have-beens,' who have no proof of their passed-away prowess save in their own unsubstantiated assertions. They depreciate everything of the present, and say, 'When I was on the Restigouche, or the Beaverkill, in '45, then there was fishing.' The still small voice of conscience never smites them; but little fault will you find with them for that. You will all be in the same boat after a few seasons more. The wrinkles will gather, slowly perhaps, but surely; the eyes fail, the limbs grow weak, the blood run sluggishly through the veins, the voice will tremble, imperceptibly at first, but the quaver will come; yet the tongue will never weary, while memory yearningly reverts to the long-ago angling days, to you the brightest tints in Time's ever-changing kaleidoscope. Then your talk will be wise and reminiscent and oftentimes thin. I'll stick to that, although I say, good old friends of the rod and reel everywhere, I forgive you all, and may the evenings of your lives be a sunset without a cloud."

MILLARD.

CENTRAL PARK.

THE condition of Central Park is a disgrace to the city, and a disgrace which is month by month growing more flagrant.

It is asking too much that commissioners, who receive their appointment through no greater special fitness for office than the color of their political creed, should appreciate and respect the designs of the landscape artists who planned the Park; and it is therefore a matter of no surprise that those designs are ignored and frustrated. But there are other, and to the general public more patent, signs on every hand of the incompetence of the present management of New York's pleasure ground. From Fifth avenue to Eighth avenue, and from Fifty-ninth street to One Hundred and Tenth street, the visitor is confronted by glaring evidences of shiftlessness and neglect.

The walks are untidy, the concrete broken and the wire fences straggling and disjointed. The mall is muddy, and through its centre runs a narrow walk of rotten planks. Here, unless the visitor exercises considerable ability in getting out of the way, he is jostled and bruised by the rampant goat teams which, with their noisy, impudent and rowdyish attendants, monopolize that part of the Park.

The stone bridges are marred by the hundreds of idiots' names scrawled over them, and many of the wooden bridges are rotten and patchy.

The arbors and rustic works are rotting and falling to pieces, without even the pretence of being patched.

The banks of the lake are seamed with the roadways of the huge rats, which vermin, with the English sparrows, are the most numerous and conspicuous members of the animal kingdom to be seen in Central Park.

Add to all this that the Park policemen upon assuming their uniform become at once thereby deaf, dumb and blind, and that the walks and rambles are infested by "gangs" of boys and roughts who salute the ears of the lady passers-by with oaths and obscenity, and we have a ready explanation of the fact that decent people are year by year shunning the Park and relegating it to the undisputed and destructive possession of the great unwashed.

If the Obelisk ever reaches its proposed site, it will be a most fitting circumstance that this monument of the ruins of the East should be erected amid the ruins of a great public park of the Western world.

ALLEGED GUN FRUITS.—J. A. Ross, of the firm of G. W. Turner & Ross, 17 Dock Square, Boston, Mass., was arrested last week by a special agent of the Post Office, for alleged violation of the postal law, which forbids the mailing of circulars concerning a scheme to deceive and defraud the public by obtaining money by false pretences. This firm has distributed throughout the rural districts, and by means of such papers as will publish their advertisement, voluminous circulars setting forth extraordinary bargains in firearms. One particular form of inducement held out is the offer to send for a certain amount a gun, rifle or revolver worth several times the price asked for it, the purchaser in reality receiving a weapon which he could buy in a reputable gun store for less than he had paid Messrs. Turner and Ross.

We have inspected one of the breech-loading shot guns which was sent to a purchaser who wrote for one of the guns styled "The Enmpress, Extra, No. 5," represented to be the highest grade of a first quality Bonehill or Tolley. The price asked and paid was \$50. The gun was, to the best of our judgment, the lowest grade of a Bonehill that is made with all the improvements, and it bears the name "Henry Tolley," evidently a play upon the name of the well known firm of J. & W. Tolley. This gun could be duplicated in any reputable gun store for \$35 or \$40. It is in no sense a \$200 gun, as represented, nor even a \$50 gun.

We understand that it is for an operation of substantially this nature that Messrs. G. W. Turner and J. A. Ross are now held in \$500 bail each to appear for examination Nov. 16.

The Sportsman Tourist.

A PRAIRIE FIRE ON THE SEVIER.

By Cosmopolitan.

ATTER a long and tiresome day's march we went into camp on the west bank of the Sevier, near old Deseret City, at 4 P. M., weary, dusty, hungry, thirsty and irritable; and the appearance of our camping place did not add much to our contentment, for there was no shade, and the water, which was brackish and scant, teemed with millions of animalcule. To get at it the men and animals were obliged to wade through soft and tenacious mud for nearly forty feet. An attempt was made to build a sort of causeway of rushes, but failed, for the more bundles we placed in position the more were needed, until the supply failed, and we were as badly off as ever, and so gave up the attempt. The sun came down as hot as Tophet, but ere long we had up our tents, and beneath the canvas roofs comparative comfort was attained.

Our chief and myself occupied a wall tent, which, compared to the little dog-houses of the men, was a palace. Our bed was of Durban, and felling on my mattress, the ill-humor I had been suffering from for several hours gradually evaporated. But not so with Mott, who tossed and turned in his blankets, used some bad language, anatomizing the country, the expedition, the Army, and the water in particular, for after several attempts to drink it he had given it up in despair.

"My dear boy," said I, "why make such a fuss? Why not compound a grand high forum of milk punch and drown your sorrows in the drowning bowl?"

A grunt was the only response. Again I repeated my query. Still no reply.

"Well," said I, "if you are too lazy to do your duty as a man but an officer, I shall myself make a punch and drink it all alone."

"Look here, Pills, what is the use of tantalizing a fellow that way? You know very well that all our liquor is gone. Our last bottle when he started; and where the Old Scratch can you find milk in this black blank prairie, unless you expect to get it from the old bell mare?"

I answered by running my hand inside my rag pillow and bringing out a quart bottle of brandy, the last of twenty-four brothers, which had been reserved for use in case rattlers should attack the camp. My companion beamed, and when he saw me extract from my haversack a can of Borden's condensed milk, eagle brand, he leaped to his feet and favored me with an usque luge.

"Hooley! Hooley!" shouted he to the cook, "put on a kettle of that water and bring it to a boil."

This was to kill the animalcule. While the water was being prepared sugar was procured and an old nutmeg found, and we anxiously awaited a chance to compound the much needed medicament.

By this time the sun was gradually sinking, and as the shadows lengthened, insects began to come out and disport themselves around us much to our discomfort. Mosquitoes by the millions, billions of bugs and multitudinous gnats frolicked and gambled. For awhile I amused myself catching some as specimens, but as they became more numerous I was forced to beat a retreat to the open air. Mott bore the torments manfully, having in anticipation "a balm in Gilead." But he eventually succumbed, and yelled: "For goodness sake, Pills, build a fire and smudge into the tent!"

I proceeded to tear up the long Indian grass with which our camping ground was covered, to serve as fuel, and leave a clear space for the fire so that it might not spread. Hooley advanced to the tent and said, "Here, Lieutenant, is the water. It has boiled, but I cooled it in the river, and ye can use it now." "Go ahead with your fire and I'll bring the punch," said Mott.

I looked carefully around to see that there was no danger of the grass igniting, wet my finger and held it up to see if any wind could be felt, all appeared safe, and I struck a match and soon had a blazing and smoking fire, and with my hat I fanned the smoke into the tent. Suddenly I felt a breath of wind from the east which in a second was followed by a dust swirl. I rushed to stamp out the fire, but in less time than it takes to write the account, some embers were blown into the surrounding grass and a terrific flame sprang up which was frightful to contemplate. I stripped off my coat to beat and cool, Mott, quick: help me to put this fire out; the grass has caught." But he intent on his disheveled manceuvre manipulation, or thinking I was joking, refused to stir. My yells brought the men in camp to my side, and, with blankets and overcoats, we fought the fire and tried to keep it down and away from the tents, but in vain. Mott, finding it no joke, rushed out and hammered away like the rest. In a few moments our tent took fire and we attempted to pull it down. Just as the last rope was loosened, Mott yelled, or rather screamed, "Our punch, our punch," and sprang into the tent, determined to rescue it, and while doing so, down it came on top of him, fire in a dozen places; but with a perseverance worthy of a better cause he held fast to the pumpkin and emerged from the ruins with it in his hands. He quickly placed it, as he supposed, in a secure place, and joined the fire-fighting crowd. The flames still capered resistlessly on, and in less than ten minutes had swept over the entire camp, with the exception of the place where the wagons were parked, and went rushing out toward the west, with ever-increasing fury, until only a long, low line of fire was visible in the dim distance.

We rested from our fruitless labors and ruefully looked around us to ascertain the damage. Every tent was burned up, the arapajos of the pack train badly scorched, and there was a general walling over scorched and damaged outer garments. My valise and gun-case were badly burned; several of our blankets were scorched, and a number of bottles of our blankets were burst. In short, we were in a bad fix. The men, old mountaineers and travelers, did not dare express their feelings too openly in the presence of their commanding officer, but the poor "tender foot" pilgrim (for such I was) came in for a fair share of expletives for stupidity and greenness. I knew I deserved all that could be said, and held my peace.

My friend walked up to me and coolly said: "See here, old fellow, did you see anything of my blouse?" "No, where was it?" "In the tent." "I expect it is burned up,

then." "I hope not, for in the pocket I had over \$400 of greenbacks—Government funds." "Great Heavens! Are you joking?" "Not at all, let's hunt for it!" He called some of the men, and lighting fourteen candles searched for the missing garment. It was found at length a mere mass of soiled rags, but no money in the pockets, for somebody had doubtless picked it up to beat out the fire, and the notes had fallen out. Another search singular to relate, about \$100 was found, but so charred that great care had to be taken to prevent them falling to pieces. I may add that a bill had to be introduced in Congress to account for the loss of this money.

"Well, at all events," said our chief, "our milk punch is all right." We walked to the place where the can was, and he stopped to raise it to his lips, but dropped it quickly, for the fire had passed over it, and the tin and contents were too warm for comfort. He let it cool, and then finished it with vigorous sighs. We crept into our blankets superfluous, and in mournful silence Mott ejaculated as he composed himself to rest, "Oh, Pills, what blanketed asses we have made of ourselves." I agreed with him, and so expressed myself and with a "Good-night" followed his example. No sleep yet awhile, for in a few minutes a drizzling rain commenced which lasted apparently for hours, and long before it ceased we were wet through, and as uncomfortable as need be.

Suddenly we heard an approaching tramp coming rapidly toward the camp, and in a few moments a band of wild horses swept over us, snuffing our blankets and our horses' stumps followed. It was no use trying to follow at that hour of the night and in the pitchy darkness, so we again composed ourselves for sleep which would not come, and sunrise saw us still awake, rueful and disconsolate. This *noche triste* cost us fifteen good horses, although all but five were subsequently recovered.

Sufficient time has elapsed since the incidents related to wear away any little shame or mortification that the principal actors may have felt, for the story has been told as a warning to those who are fond of a night's milk punch, and may perhaps be ignorant of the danger of lighting fires on a grassy prairie. My friend and companion still ornaments the Army, and a better or truer comrade never wore the brass and blue.

A STORY FROM MONROE.

SITUATED on the broad, shallow river basin, near Lake Erie, Monroe, Michigan, presents an attractive side to the sportsman the year around. In the early autumn the woodcock in the thick stubble and peat lands that border the river command his attention; later, he can pursue the ruffed grouse, quail and turkeys in the uplands; and when the cold north winds have turned the marsh grass in the bays at the mouth of the river to a golden yellow, he can enjoy the best sport of all among the myriads of canvas-backs, red-heads, and other wild-fowl that select this place as their feeding-ground. Nor will his sport end here; for when the trees are again green, and the water-lilies and the flowers of the stately lotus are again in bloom, he can quietly drop his flies in the ripple below some half-sunken log, and a three-pound bass will test the pliancy of his rod and the skill of his good right arm.

Perhaps as remarkable an illustration as has been afforded of late years of the abundance and variety of game at Monroe occurred in the fall of 1875 in the following incident, which can be substantiated by the old gunners and boatmen of the marshes:

A gentleman from Syracuse, N. Y., who has passed a portion of every autumn at Monroe for several years, arrived late one Friday evening, and was grieved to learn from the sportsmen already arrived that the ducks were so scarce on the marshes that the sport would hardly repay the unpacking of his guns. Determined to stay and investigate for himself, however, our friend unpacked his trappings, and the next afternoon, while awaiting the arrival of his dilatory hunter, he concluded to take a light run, and his gunner, and make a prospecting tour in the North Marsh. Paddling about for some time in his accustomed haunts, the sportsman came to the conclusion that his fellow gunners had rightly informed him, for at the end of nearly five hours of weary punting he had only half a dozen ducks to his credit. Wishing to stretch his legs a little after maintaining a cramped position so long in the boat, our friend landed at the Carry, and walked aimlessly down the sand bar. At Sandy Creek Cut he sprang a flock of wildgeese, one of which he dropped four, and seeing a couple of green-winged teal approaching at a distance he hurriedly inserted two fresh cartridges, dropped behind a bunch of rushes, and as the tail passed with bullet-like rapidity down wind, he gave them both barrels, and was delighted to see them drop in the marsh. He had no sooner secured this pair, than half a dozen wildgeese, anxious to finish their supper, came circling around a clump of marsh grass, a long gunshot away, and one was so unfortunate as to be killed by the hunter's right, and while he was returning toward his boat with his load another, a solitary old drake, was added to the pile. Depositing his trophies in the boat, the hunter concluded that, as twilight was fast approaching, he had better be seeking home, and with paddle in hand he was preparing to shore off, when down with the west wind came a single "honk!" Being on the marsh side of the bar, the hunter was near no cover, but trusting to luck he dropped to on the sand, and without turning, cast his eager eyes to windward and saw a flock of about a dozen Canada geese flying low over the bar. As they came in trees, and skirting the lake side of the bar. As they came in line, about twelve rods away, the motionless hunter gave his single "honk!" and as the birds hesitated a moment in their flight, the gale drifted them closer in, and "bang! bang!" spoke the Greener, and two noble geese fell, one on the bar and the other out some distance in the lake. Retrieving the first one, the hunter concluded to leave the other to be picked up afterward, as the gale rendered it unsafe to embark on the bar with his little punt. "Glory enough for one day," thought he, "I have had my good Greener and hugged the fat goose on his way to the boat; but are he and I pressed half the distance he caught a glimpse of something that made him drop the goose on the sand and stop still in amazement. Just one glimpse, but enough to distinguish three fat, sleek turkeys running through a narrow belt of bushes, right in the path. "Pshaw! tame fowls probably," thought our friend, knowing it to be an unlikely place for wild turkeys, although they were frequently shot in the uplands back from the bushes, gazing in the very face of the motionless hunter, who, still doubting in the uncertain light, took two rapid steps forward, and as the birds immediately took wing, he drew on the gobble with his right and the biggest hen with his left, dropped both, and gazed begrudgingly at the other retreating bird, thinking what a good thing a three-barreled

gun might be in some cases. The male bird was a fine specimen, weighing fully fourteen pounds, and the hen about nine. Their glossy plumage and soft, velvety fur on the neck and legs told our friend that he had not made the mistake of shooting a neighbor's favorite gobble, and gathering his wits as he retreated to the boat, he deposited his load and made his way in the darkness to "Uncle Joe's" where he was awarded the honor of bringing in the best bag of the season, considering the time occupied in securing it. As Uncle Joe said: "You was foolish for comin' in so soon, for while your luck was on you might 'a' shined a buck or a catamount. I shouldn't expect nothin' less with such luck as you had."

The abandoned goose (a large one) was picked up next morning on the shore, where it had drifted during the night, making the bag just fourteen ducks, two geese and two turkeys, all except six of the ducks—shot within a half hour.

SENeca.

COUR D'ALENE LAKE.

ENGINEER'S CAMP, NEAR SPOKAN,)
Washington Terr., Sept. 30, 1880.)

LARLY last month I received instructions from the Eng. Pen d'Orville Div. N. P. R. R., to proceed without delay to Cour d'Alene Lake, and its southern tributary, the St. Joe River, to look after every thing interests in that direction. So, one bright morning I left Asst. Eng. Scovill's camp, with blankets and fly-rodd strapped behind the saddle, and the following afternoon arrived at Cour d'Alene Post, one of the most beautiful and romantic spots to be found within the boundaries of Uncle Sam's dominion. Taking no heed of entreaties to remain there and fish a day or two, and proof against the inducement held out by a friend of "eighty-three trout yesterday afternoon of two pounds," I engaged a boat and guide, and proceeded to lay in provisions for two weeks. We were off bright and early in the morning, the guide taking his rifle, and my own outfit being reinforced by one of Colt's new breech-loaders. Rowing leisurely, for the day was hot, and the trout more than anxious to take the fly as I cast from side to side occasionally, at four o'clock we made camp on the beach below a rocky point, about eighteen miles from the Post. Those three and four pound trout were delicious, but, alas for human calculation! we found that five of them among two men—and men with mountain appetites, too—were just two and one-half too many. But they were not wasted, for here is an end to all things, even a Indian's appetite, and as we swabbed up the last bit of green in the frying-pan with one hand, I grasped the other, and in tearful accents begged him to visit us to-morrow and to bring all his family, from his mother-in-law down. He gracefully accepted the invitation, and after giving us a big chunk of venison, and the information that we could kill "hi-yu" (deer) as soon as we reached the St. Joe meadows, grasped his paddle and was soon out of sight around the next headland.

His information was correct, for it is my honest opinion that there is no deer, nor deer hear to the distance, even in the Valley than in any other portion of the known world, and Eastern sportsmen should hope for the speedy and safe completion of the N. P. R. R., if for no other purpose than to open up this magnificent sporting domain to the guild. The lake itself is some thirty miles long, but as it has been described in your columns by able pens than mine, I will confine myself to the river, which enters at the southern extremity of the lake. It takes its rise nearly two hundred miles from here, amid the eternal snows of the Bitter Root Range, and near the headwaters of the Greener. Its average width from mouth to rapids, which was as far as my instructions told me to go, is about seventy-five yards. Depth of water, from fifteen to twenty feet, and clear as crystal. The current is so slight as to be scarcely perceptible. The banks are lined for the most part with huge cottonwood and willows, while here and there tower huge belts of gigantic fir, cedar and pine.

The valley itself is some huge meadow, from one to three miles in width, hemmed in on either side by the majestic mountains of the Cour d'Alene range. Years ago the Catholics founded a mission there, and as an evidence of the zeal and energy of the priests in charge, about ten miles up the river, surrounded by fruit trees, stand the old mission houses and barns, while acre upon acre of timothy grass waves in the wind and gladdens the heart—and appetite—of deer without number. Every winter the Indians resort there to participate in their annual "drive," and an old "Siwash" showed me one point where last January they killed one hundred and eighty deer in two days. Their *modus operandi* is as follows: First, selecting a narrow neck of meadow, the forest is cut by a bend in the river, they divide into parties of twelve or fifteen, each under control of a captain; then, proceeding to the hills a few miles from the river, they separate, keeping within hailing distance of each other and form a semicircle of several miles in length. Now the drive begins in earnest, and with shouts and cries such as Indians only know how to utter, the frightened deer are driven before them, the outer edges of the semicircle gradually closing in upon the timid creatures until the river is reached, and the deer, seeking the hills, and the mountains catch the sound, and send the echoes from peak to peak, until the last deer is killed. There is plenty of danger attached to the drive, as witness the case of friend C., who participated in a drive on Hayden Lake last winter, and was only too glad to seek refuge in a huge hollow log, to escape the too many stray bullets that were whizzing about his ears.

I found the best fishing near the rapids, about thirty-five miles from the mouth, and on the evening before I left, landed at six consecutive points, the eleven trout, whose combined weight was twenty-eight pounds. The largest trout I killed weighed six and one-quarter pounds, and I saw many larger ones. They differ greatly in appearance from those taken in the Spokane River—at least, the larger ones do. Their bodies are long and slender, tapering from head to tail; above the lateral line is a row of bright red spots; eye extremely large and bright; under jaw tinged with crimson, two double rows of teeth, and teeth upon hyoid bone; tail almost, if not quite, as square as that of *Fundulus*. I have fished the waters of Maine, New Hampshire, and Puget Sound, and have killed plenty of hard fighting trout and salmon, but in all my experience I have never seen any fish, trout or salmon which pos-

sess such a fund of pluck and endurance as do those St. Joe beauties.

In a few weeks the meadows will resound to the cries of countless wild fowl, and I venture to predict that in a few years Cour d'Alene Lake and its tributaries will become the Mecca toward which the best sportsmen in the United States will yearly turn their eager steps.

This month my duties led me to a little lake six miles long, about thirty-five miles north-east of Spokane Falls. A lovely sheet of water, nestled among the pines in the foot-hills of the Cour d'Alene range. There one afternoon two of us killed ninety trout, from one to three pounds weight, and while returning to the "The" camp at dusk, the waves kindly drove a two hundred pound buck down upon us, and we, nothing loth, gathered him in, with a shot from a .45 cal. rifle, and we feasted upon his juicy ribs in the bright moonlight, to the tune of "A frog he would a wooing go," played upon a cracked fiddle with two strings.

The sporting world probably does not realize what will be universally known in a very few years, that the Northern Pacific Railroad will prove the "open sesame" to the finest game and fish region in America, where sporting will be a pleasure, and not the toll that I have often found it in Maine and New Hampshire while fighting cats and mosquitoes with one hand and trying to land a poor little half-pound trout with the other. We have very little occasion for the use of tar and oil. Prairie chicken shooting is at its best now, the whole country is alive with them, and a three hours' tramp in the vicinity of Eng. Scovill's camp is sure to result in a full bag. The numerous lakes throughout this section of Washington are beginning to be covered with swans, geese, and ducks, and the honest granger will have a welcome addition to his regular diet of potatoes and bacon. H. B.

Natural History.

OUR WATERFOWL.

WITH the approach of winter the season for wild fowl shooting draws near. Already the guns have commenced to sound both in the interior and along the coast. In the marshes of Canada and the Western States the mallards, teal and pintail are falling thick and fast, and on the Chesapeake the boom of the heavy guns has, since November 1, sounded the death knell of many a canvas-back and black-head. People are beginning to paint up their geese and brant decoys, to bait their blinds, and to load their shells with BB's; and with the first real cold snap we shall receive reports of the bags made at the various shooting resorts, inland and along the coast, on the geese and brant.

We so constantly receive inquiries from our readers in relation to waterfowl of different species, which they have killed, but are unable to identify, that it seems worth while to give some facts in regard to these birds in order that each one may be enabled to tell for himself the names of such as may fall into his hands. It would be for the interest of each sportsman in the country to purchase a copy of Dr. Cones' admirable "Key to North American Birds." By the aid of this work, the reader, after a little practice, would be able to settle for himself all questions with regard to the identity of any of our game birds, and could learn the differences and relationships between the different groups.

The term waterfowl, which is frequently loosely applied to our shore birds or bay snipe, might better be restricted, it seems to us, so as to include only the swans, geese and ducks. These constitute three sub-families of the *Anatidae*, a group of great size and economic importance, and of very wide distribution. Dr. Cones gives one hundred and seventy-five as the number of species included in it. He says of these, "They differ a good deal in minor details, and represent a number of peculiar genera aside from the ordinary types, though none are so aberrant as to endanger the integrity of the group."

North American waters are certainly well peopled with birds of this group, of which not far from fifty are enumerated in our works on ornithology. Of these there are two swans, ten geese and four varieties, twelve species of *Anas*, or river ducks, twenty-one and several varieties of *Fuligula*, or sea ducks, and three of *Mergina*, or fish ducks.

As a rule those species of the *Anatidae* which inhabit fresh waters are more delicate in flavor than those which frequent the sea exclusively. The flavor of any animal's flesh depends in such a great measure upon its food that it is evident that a bird which feeds to a considerable extent on vegetable food will be more toothsome than one which confines itself to a diet of fish or mollusks, and so we find that the typical sea duck, such as the genera *Colymbus*, *Harlequin*, *Somateria* and others, and the fishing ducks, *Mergus*, rank very low as table birds. On the other hand, swans, geese, the *Anatina*, and many of those ducks which, though included by systematists among the *Fuligulina*, pass the greater portion or all of their time upon inland waters, are among the most highly esteemed of our food birds.

The *Anatina*, both from their aquatic habits, are warmly clad with a thick covering of feathers, which form an efficient protection against cold and wet, and for these feathers they are destroyed in great numbers. During the excessively severe winter of 1874-5 Long Island Sound was frozen over, and the black ducks, which were wintering on it, were unable to obtain food in any quantity, and thus became extremely thin. At this time they were accustomed to resort in great numbers to certain warm spring holes in New Haven County, Connecticut, to pass the night and feed, and here they were slaughtered by the hundred, simply for their feathers. They were quite unfit for food, and no one having the instincts of a sportsman would have disturbed them at such a time. No one, we think, would feel disposed to criticize the action of any one who chooses to save the feathers of a bird that he

kills in a legitimate way. But to kill game when it cannot be eaten simply for its hide or its feathers is neither more nor less than pothunting of the worst type, and is entirely unjustifiable from any point of view. Happily, such opportunities do not often present themselves, for, in the East at least, birds are seldom found in sufficient numbers to make such butcher's work profitable.

Those members of the duck tribe found within our borders are readily distinguishable one from another, and there is no reason why all our readers should not be familiar with them all. There are, it is true, a few cases in which the young of one species bear a somewhat close resemblance to the young of another, but in most cases they are so different that even the least observant gunner can distinguish the different species. Years ago we frequently used to have the question asked us, How does a red-head differ from a canvas-back? and after answering it for years, we are now led to believe that all our readers are able to tell the two species apart.

We shall publish next week some remarks on our swans and geese, and shall follow these up with others on the ducks, trusting that the information thus given may be of real practical value to sportsmen.

[TO BE CONTINUED.]

GULLS IN CENTRAL PARK.—Visitors to Central Park during the fall before freezing weather comes will do well to observe the gulls which are to be seen in great numbers about the reservoir, either resting on the water or flying over it. At a distance they appear to be snow-white, and whether winging their way with graceful flight from one end of the reservoir to the other or floating lightly on the water's surface, they are beautiful objects.

We have as yet observed but two species among them, *Larus argentatus* and *L. delawarensis*, though others no doubt are sometimes to be seen.

DEATH OF THE WOODCOCK DICK.—*Editor Forest and Stream:* From the time I read your article entitled "A Captive Woodcock" I decided that I would if possible procure one, and also that I would see Mr. Morris' bird as soon as possible. When I did see him I was very much pleased, and decided to purchase him, which I did, and kept him at first in a box about 40 inches by 20 inches by 18 inches, with small wooden bars in front, but the back, top and ends solid. I placed a straw nest 4 inches deep over the bottom, except in a small pan 9 inches by 5 inches by 8 inches deep, where I made a soft wet place for him to bore in. He did very well, and was healthy, and I decided to have a new cage built for him. It was 4 feet long, 2 feet wide, and 28 inches high in all. I had made a pan 4 inches deep, filling the entire bottom. This I filled with moss and put a small henlock tree in the cage. He did not seem to like the changes as well as I had hoped he would, and when I went in to see him one day he came out, but when I approached it carefully he was quiet. I always fed him morning and afternoon with a handful of earth worms.

One afternoon when I came home I went up stairs to see him and found the maid sweeping the room. This of course had frightened him very badly, and all the feathers were knocked off his poor head and the joints of his wings, and there was blood on the wires. This made me feel pretty badly, but I put him in his old cage and proceeded to tack some green cambric on the top and sides of the large cage to darken it, as I thought it must be the light which made him wild, as he was much more quiet in his old place and gentle. One morning two days after his accident he did not look well, and stood with all his feathers ruffled up, and eat only a few worms. I placed him in his new cage and gave him plenty of worms, and in the afternoon he looked better, but the next morning he was dead. I never felt so badly about anything before.

I think the trouble must have been partly the banging he gave himself, and partly his food, as he was pretty poor at the time of his death. I think the worms given him crawled away among the roots of the moss and thus a great many escaped him.

A woodcock should be fed each day his full weight in worms, say six ounces, three in the morning and three in the afternoon. He should have a place to bathe in, and one to hide in, such as some ferns. F. P. MAGOEN.

No. 10 East 87th street.

BATS STILL FLYING.—A correspondent who writes us from Yonkers, N. Y., under date Nov. 5, says:

"While I was riding home one evening last week I saw what I took to be a bat. I called the attention of my friend who was in the wagon with me to it. I said it was a bat, but he didn't believe that bats showed themselves late in the fall. Could it possibly have been a bat? It was quite warm that evening."

It was no doubt what you took it to be. We saw on the afternoon of Saturday, Nov. 6, two bats busily engaged in catching insects.

SKUNK BITE.—*Editor Forest and Stream:* I read with much interest the articles in your paper upon the effects of the bite of the skunk upon the plains of the great West. It seems to be a case clearly made out that a very common, if not invariable, sequel of skunk bite there was hydrophobia. I have heard no such result east of the Mississippi, nor have I been able to learn of any after considerable inquiry among my friends in various parts of the country. The following case of a dog in Chester County, Pa., has recently come to my notice. I have not been able to collect so many facts in the case as are desirable, but those that I could gather make the case an interesting one. I submit them to you and to your readers without comment, hoping that others may follow them up by careful personal observation with opportunity offers. The dog attacked a skunk and killed him. It seems the scuffle the dog was bitten. Between one and two weeks afterward he was taken sick, refused all food, his jaws were set about an inch apart, he lapped water but could not swallow it. Saliva constantly flowed from his mouth. After some days he died.

This is a peculiarly interesting case, as the symptoms observed in the dog seem to point towards true rabies. There

has been up to this time, we believe, no record of a dog's becoming rabid from skunk bite. We shall hope to receive further particulars of this most interesting case.

HABITS OF THE BEAVER.—Recent items concerning the extinction of the beaver which have appeared in your paper would almost convey to the casual reader the impression of their non-existence east of the Mississippi River. True, like the red man, they have fast disappeared before the advance of civilization, but from our extended trapping excursions carried on for the past eight years we know of their existence in four of the Southern States east of that river, and think they can yet be found within a limited territory in some of the Northern States. It would be almost impossible to get a true and loyal trapper to write to *FOREST AND STREAM* or any other good paper the exact whereabouts of a colony of beavers. Such wholesale information is but rarely given, and we would be very sorry to throw broadcast such valuable information to amateurs of the trap, who would frighten away more than they would catch. The beaver seldom takes up his abode so near a white settlement as to seriously inconvenience the farmer by the damming of the creeks or the destruction of his crop of corn. Although we have seen instances of their destructiveness which caused great desire among the farmers to get rid of them, the continuous nuisance. The beaver is the most industrious of all the fur animals. In fact most of the other fur-producing quadrupeds are prowling thieves that under cover of darkness roam through the swamp and forest in quest of food, and some, as the mink, skunk and opossum, will not hesitate to raid on the hen roost or a nest of eggs. The very old saying, "Work like beavers," has been well founded, as they are a most innocent and industrious race, living entirely upon vegetable food procured by their own hands. They will work the whole night to repair a break in their dam, felling small trees and dragging them in place, and afterward drawing up a great quantity of mud and leaves, which are firmly settled into place by the vigorous use of their broad, flat tail. In our trapping campaigns we always felt our conscience a little touched when we had to kill these very innocent animals. Unlike all other wild fur animals of the trap, they are perfectly harmless. Their one-sided houses, very comfortably constructed, are placed on a stream some time ago will have had special interest in watching them, and have become fully convinced of their insectivorous habits.

Several weeks ago a couple of friends and myself were enjoying a quiet smoke in the garden when our attention was attracted by the peculiar darting flight of a large number of sparrows. Upon a closer scrutiny we found that they were busy catching a winged insect of large size. They would dart up into the air and secure it, or they would alight on the grass, and then swallow it. We watched them for nearly an hour, and in all that time they were very busy.

I noticed subsequently that they seemed to enjoy this kind of food, particularly just on the eve of a shower of rain. They were not driven to seek this kind of food from lack of other. On the contrary, the men (convicts) feed them daily on bread which they strew all over the place, and they have access to all kinds of grain and fruits. I have also noticed them busy among the flower beds and plants, hopping about in quest of the insects who infect them. As "Flint" says, the cocks do have battles royal among themselves. (Others than cock sparrows raise "ructions" for a preference with the gentle sex.) Swallows, martins, robins and grass birds are numerous here, but the sparrows live amicably with them. The much petted and favored robin is the greatest robber and fruit destroyer among them.

Allow me to tender you my thanks also for your exposure of that villainous compound, Dittmar powder.

AL.

WILL IT LIVE THROUGH THE WINTER?—*Harrodsburg, Ky., October, 1890.*—A hummingbird was captured in a room by Miss Ada Huff, whither it was attracted by a flower. It has been thoroughly domesticated, and is fond of being caressed. Takes food from hand, and returns from its wanderings to the room in which it was caught. When shown up by lamp-light it was perched upon a flower. Its accustomed perch at night is the top of a canary cage.

K-S.

SNAKES IN KENTUCKY.—*Mill Springs, Ky., Nov. 1.*—Snakes are numerous and varied in vicinity of our new mountain home you'll readily credit when assured that the of different kinds were killed one forenoon last summer within half a mile of the house, one a viper, with a few peaces. The subject of hissing in *FOREST AND STREAM* led me to interview several of the old natives, and the universal assurance was that only the viper and a species of black snake—the racer, I think—have been known to hiss.

A friend not long ago "set out" a line and hook baited with a lively chub-nugget, on which, next morning, he was chagrined to find a huge water snake, instead of a toothsome bass as the lively motion of the swinging limb led him to anticipate. Wasn't it a rare catch? KENTUCKIAN.

A HEAVY MALLARD.—*Baltimore, Oct. 25.*—In the fall of 1877 I shot a mallard on the Arkans River which appeared so unusually large to me that I had him weighed at the village store. He tipped the beam at 4 lbs. 2 oz., and was considered by those who saw him as the largest in their experience, and truly he was immense. FREDERICK.

WEIGHTS OF QUAIL.—*Mill Springs, Ky., Nov.*—A few seasons since Capt. G. H. McKinney, of J. M. & I. R. H., and the writer were quail shooting in the mountains, where weighing comparatively unknown, we found a quail of extraordinary weight of a hen quail prompted me to weigh it on our return home, thirty-six hours after it had been drawn. Its head was pulled off in detaching it from the string, and without head and entrails it weighed 8½ oz. on a pair of druggists' balances. It was fifty per cent. heavier

than the next largest from a string of fifty. Much the largest I ever bagged in twenty years' shooting. KENTUCKIAN.

WEIGHT OF RUFFED GROUSE.—*Ashfield, Mass., Nov. 6.*—I killed yesterday the largest ruffed grouse that I ever weighed. It turned the scale at 1 lb. 13 oz. He was one o' a bag of eight made that day. The seven others averaged less than 1 lb. 4 oz. each and were about average birds. I have been shooting constantly since September 1, and rarely bag a grouse that weighs over 1 lb. 8 oz. RUFFED GROUSE.

RECENT ARRIVALS AT THE PHILADELPHIA ZOOLOGICAL GARDEN.—Three black spider-monkeys, *Alouatta* aff. four brown capuchins, *Cebus fustellus*; five thence monkeys, *Macaca rhylinus*; two common macaques, *Macaca cynomolgus*; two bonnet monkeys, *Macaca radiata*; one yellow-crowned night-heron, *Nyctyrus violaceus*; two weeper capuchins, *Cebus capuchinus*; one prairie wolf, *Canis latrans*; one entellus monkey, *Semnopithecus entellus*; one Guava spider monkey, *Ateles marginatus*; one herring gull, *Larus argentatus*; one merlin, *Falco aestas*; and two yellow baboons, *Cynocephalus babuin*, all purchased. One great horned owl, *Bubo virginianus*; three raccoons, *Procyon lotor*; one bayed snake, *Heterodon platyrhynchus*; four marsh hares, *Citellus cyanus hudsonius*; one red-winged blackbird, *Agelaius phoeniceus*; two alligators, *Alligator mississippiensis*; one black-necked stilt, *Actinonotus stilt*; two sparrow-hawks, *Falco sparverius*; one yellow-shafted woodpecker, *Colaptes auratus*; two red salamanders, *Spelerpes ruber*; two pine snakes, *Philophis melanoleucus*; one water snake, *Tropidonotus sipedon*; one common kitten, *Botaurus minor*; one Northern snail, *Columba turkmenicus*; one dipper, *Amphispiza bilineata*; one common crow, *Corvus americanus*; one rattlesnake, *Crotalus horridus*, all presented; and one marmoset deer, *Cervus campestris*; born in the Garden.

ARRIVALS AT THE ZOOLOGICAL GARDEN, CINCINNATI, TO NOV. 1.—Two Baltimore Orioles (*Icterus baltimore*), three orchard Orioles (*Icterus spurius*), one yellow warbler (*Dendroica aestiva*), one black-bellied Plover (*Colaptes auratus*), one blue-headed Vireo (*Cyanocitta cyanea*), one black and white creeper (*Parus carolinensis*), one chevron (*Parus carolinensis*), two lead-headed cacklers (*Coccyus leadbeateri*), two slender-billed cacklers (*Coccyus tenuirostris*), all purchased; the ground squirrel (*Sciurus striatus*), one east of *Peromyscus*, six mountain quail (*Oreortyx pictus*), six valley quail (*Lophortyx californicus*), all presented; one hog deer (*Cervus porcinus*), born in garden; four hermit thrushes (*Turdus paucis*), received in exchange.

FRANK J. THOMPSON, Supl.

Fish Culture.

ACCLIMATIZATION OF BLACK BASS IN ENGLAND.

M. R. SILK, fish culturist to the Marquis of Exeter, Barleigh House, Stamford, writes me the following gratifying intelligence. FRANK BUCKLAND.

"All of the black bass that I brought from the United States of America were taken from the Delaware River. I have then caught and placed in boxes, floating in the stream ready to be taken away when wanted. On the day preceding the sailing of the steamer for England I had them placed in the tanks I had prepared for them by the river side, and sent them to the train without any loss, and on arriving at New York had them placed on the main deck of the steamer; it was then 11 p. m., we having left the Delaware River at 3 p. m. Up to this time I had no loss; my greatest trouble was the high temperature it stood at—73 deg. all night. I kept the water as cold as possible with ice, which I had placed on the ship before going for the fish. I stayed by the tanks all night pumping air every few minutes, and keeping people from meddling with them. When daylight came I examined the tanks and found five dead fish, which I removed at once. It was now 5 a. m., and the ship was to sail at 6 a. m. I got some men to assist me in changing the water in the tanks. I had one spare tank, which I filled first, then reduced the temperature from 73 deg. as it came out of the hydrant to 68 deg., then placed the bass in it, and so on until I had given them all fresh water. We sailed at 4 a. m. sharp. When we got out to sea a few miles I made arrangements with two of the steerage passengers to assist me on the voyage. It was then 9 a. m. I gave them both instructions what to do, and saw that they understood their work. I had then been twenty hours with the fish; and wanted a rest. After this I arranged with my men to keep watch two hours each, and to relieve each other at meal times. I always took four hours' watch at the night, from 12 until 4 a. m. I then took one of the fish. We cleared the water every day by straining it through flannel, all thick and dirty water we threw away and added some fresh water made by melting ice. The sixth day our water got cooler weather, and the fish commenced to do better. The temperature of the atmosphere dropped to 57 deg. We used very little ice unless to make fresh water with. We kept on like this until we reached Liverpool, after ten days' passage. I now got fresh water and changed all the tanks. The fish did not object in the least, but were quite lively. It did not hurt them changing the water from American to British. I got them conveyed to the railway station and placed on a truck. We arrived at Stamford in due course, and on counting the fish I found we had 153. I left the Delaware with 250, so that I had lost 93 fish in twelve days.

In 1879 I went again, and started from America with 1,200 black bass, and on arriving home I had 812, having done better than I did on the last occasion. All the black bass were for the Marquis of Exeter, he having borne all the expense of the experiment. Most of the fish were placed in a lake belonging to his lordship called Whitewater, near Stamford. Not any of them have been caught yet, but two of them were found dead in a pipe, where they had got jammed. The pipe supplied a filter, and they had got in and could not get out again. From what I could learn they would be about half-a-pound each in weight, so that they had done very well. The first lot that were put in were three years old April, when they are expected to commence breeding."

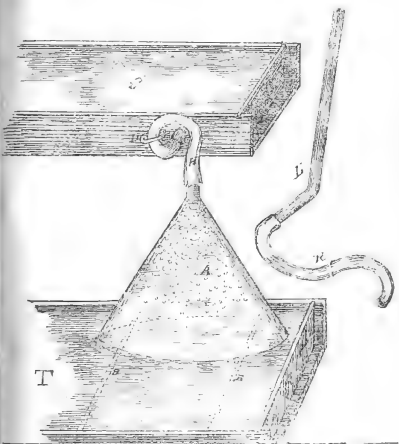
We take the above from *Land and Water* of a recent date. Some one has said, and it appears to be the general impres-

sion, that all importations of our fresh water black bass into England have been the big mouth, *Micropterus palidus*, but if these came from the Delaware River it is likely that they are the *M. salmoides*, although both species may exist in that river, yet we do not remember to have seen a "big mouth" from there. They were called *Grytes nigricans* in *Land and Water*, *Grytes* being an obsolete name for the genus while *nigricans* is now known as *pallidus*, the "big mouth."

APPARATUS FOR HATCHING FLOATING EGGS, SUCH AS THE COD AND MACKEREL.

A GLASS funnel, A, having a diameter of twelve or fourteen inches (larger if they can be obtained) is supported upon wooden, BB, strips four inches high in the shallow wooden trough, T. The width of this trough is equal to twice the diameter of the funnel, and the depth is six inches. It may be made of any convenient length to allow for a row of funnels. The upper end of the funnel is connected by the rubber hose, H, with a wooden spile in the wooden tank, C, and the flow of water through the tube is regulated by the pinch cock, D. The level of the water in the tank, C, is maintained constant by an automatic cock communicating with a reservoir which is kept filled by pumping (this is not shown in the figure). The funnel being in position, and connections made, water is turned on and allowed to run until the trough, T, is full.

The funnel is now filled with confined air, which cannot escape, and which may be withdrawn either by suction



through the bent tube, L, or more readily attaching to the hose connection R, a rubber hand-pump, by means of which the air is rapidly exhausted. As the air is withdrawn the water rises in the funnel, and finally fills it and the tube connecting it with the tank. The funnel once filled with water it will remain so, and we have now only to regulate the flow so as to suit the buoyancy of the eggs to be treated.

To introduce eggs, they are placed in a shallow pan, which is completely filled, and a flat cover placed on. The pan is then sunk in the trough in front of the funnel and pushed under it and the cover removed. When the eggs, by their buoyancy, will immediately rise up to the throat of the funnel, and there, meeting the descending current, will be projected down a distance determined by the size of the eggs, their buoyancy and by the strength of the descending current, which must be so regulated that none of the eggs shall pass between the lower margin of the funnel.

To remove the eggs for the purpose of working them over the water is checked off so that the eggs may crowd up into the upper part of the funnel. The tube, L, is filled with water by dipping the glass end in the tank and sucking through the other. When the tube is filled with water the rubber end is placed in the receiving pan, and the glass end carried up to the throat of the funnel, when all the eggs will be rapidly transferred through the tube, L, to the pan, where they may be examined, worked over and returned to the funnel as before.

In the case of the codfish, and probably of the mackerel, the dead eggs are sensibly heavier than the living. They may therefore be easily sorted out by so regulating the flow of the water as to throw them out of the funnel. The fish, as they hatch, will swim off with the current and be collected in the tank to the selves.

This apparatus will, I think, be found effective in hatching any eggs of sensible buoyancy. My experiments have heretofore been with artificial eggs, and with them the working is all that could be desired. There is no reason to suppose that the working will be less satisfactory with the natural. The apparatus is of the simplest construction, very cheap, absolutely non-corrosive in salt water, and I respectfully commend it to the attention of our fish culturists, who have full liberty to use it.

M. McDONALD.

MAINE FISHING NOTES.—We learn from the Belfast *Journal* that on account of the failure of the French fisheries, Eastport sardines have advanced to \$2.50 per case, with the prospects of a still further advance. At Boothbay, the cod, lake and mackerel fishing has been unusually remunerative, both to fishermen and fitters. Mr. Wynnan, of Bath, has been at Lee's Island getting ready for the snail fishery. The selectmen of Noleboro and Newcastle are repairing the fish locks. They use hake sounds for currency at St. Stephen, N. B. One of them will buy a real Havana cigar or a plug of tobacco. At Grand Manan lately there was an auction sale of 10,000 lbs. of sounds, and they brought 27 cents per lb. Up to Oct. 25 there had been packed in Portland, 55,000 barrels of mackerel, against 52,000 barrels for the whole year of 1879. There are no mackerel of any importance upon that market. The year has been a successful one in the catch as well as the disposal of the fish.

EGGS OF SPANISH MACKEREL, PORGEE, ANCHOVY AND OYSTER.

DURING the past week your correspondent dropped in at the Philadelphia Academy of Natural Sciences, and had the pleasure of again meeting Mr. John A. Ryder, of this institution, who has been prosecuting his observations with the United States Fish Commission at Havre de Grace during the past summer on the food of the adult and young shad. The latter information was in great part gained at the Navy Yard hatching, at Washington, D. C., respecting the growth of the roe shad. Mr. Ryder's coming report of his observations and study will be of a very interesting character, and is looked forward to with great eagerness by students of this branch of natural sciences.

While at Mobjack Bay, western shore, Chesapeake, Mr. R. commenced his work on the development of the Spanish mackerel, and he tells me he has discovered the eggs of this delicious food fish immediately after being ejected, and hatch in twenty-four hours. He succeeded in hatching them indoors in a pan of water in this time, changing the water but twice.

The eggs of the common porgie likewise float and hatch in the same space of time. The spawn of the flounder or fool fish he found were of a green color, and but 1-50th of an inch in diameter. In relating to your correspondent some of his interesting discoveries, he stated that the American anchovy's eggs, when emitted, have four minute threads attached to them, all growing from one point, which at first are tightly wrapped around the egg, but which unwind and catch on blades of grass, seaweed, etc., etc., thus tethering it, as it were, until the fish is hatched. The egg of the American anchovy, he tells me, is somewhat buoyant.

Col. MacDonald, of the Virginia Fish Commission, is getting up a machine for the hatching of the floating eggs of the cod, Spanish mackerel and porgie, which we understand is of very ingenious structure.

Mr. Ryder gave me some very interesting points from his study of the oyster while with the Maryland Fish Commission in July. In eighty-two days after being spawned young oysters were collected that had grown nearly two inches, and some that measured $\frac{1}{2}$ of an inch in diameter, showing that the American variety develops much more rapidly than that of Europe.

Maj. Ferguson, of the Maryland Fish Commission, has selected a pond in a favorable locality, and intends to modify and arrange it after the French plan, for the continuing his observations and prosecuting his experiments regarding the breeding of the American oyster, and there is no doubt that what has been gained this summer will lead to perfection in what has long been looked to as a coming and valuable branch of industry. Mr. Ryder also discovered that the eggs of the soft shelled clam develop like those of the fresh water mussel, and succeeded in impregnating the ova, after discovering by microscope and removing the male spermatozoa and female spawn in proper season.

Homo.

THE FISHERIES AND FISH CULTURE OF HOLLAND.

BY favor of Mr. C. J. Bottemann, Supt. of Fisheries of the Netherlands, we have received the report of the Netherlands sea fisheries for 1879 (Verslag van den Staat der Nederlandsche Zeevisserijen over 1879), and the report on the condition of the fisheries in the Scheldedam's tributaries for the same year (Verslag omtrent den toestand der visscherijen in de Scheldedam's Zeevisserijen over 1879), from which we gather the following facts: Since 1875 the herring fisheries have increased from 392 tons to 3,063 tons. The catch of edible fishes in the North Sea is not so great as in former years. Mussels are extensively "fished" for and eaten, there was received at Billingsgate market during the past year 1,456 tons from North Holland, 459 tons from South Holland and 759 tons from England; while from the British Islands and Holland there was received 2,578 tons of periwinkles.

Of 59,300 eggs of the California salmon received from Prof. Baird, U. S. Fish Commissioner, 46,000 young were planted. The salmon fishery has been good for the year named. The first-mentioned report gives interesting tables of the catch of cod and other edible fishes by the Dutch, French, German and English fishermen, as well as the numbers of each kind of fish sent to the principal markets of the different countries. The report on the Scheldedam gives an account of the boat fishing for halibut, the "white" (probably whitefish, *Clupea Merlangus*), the sprat, or sardine, the "harder" (*Clupea*) herring, and anchovy fisheries. The latter fishery has been very bad for the past year, and the oyster fishery, which in Holland is a large industry, has not been good.

ARKANSAS HAS A FISH COMMISSION. We very much regret that in our annual list of Fish Commissioners it so happened that this State was left out. We gave our reason for doing it, which was that no reply to our letters had been received. As it is our intention to compile such a list annually, wholly for the benefit of the Commissioners themselves, that they may exchange reports and correspondence, we hope that as FOREST AND STREAM is the recognized medium of communication our next list will need no correction, and that the change will be made in the list all the time, and so in making it up for publication we take nothing for granted, but proceed as if such a list was being made for the first time.

All who are interested in the progress of fish culture will rejoice to know that Arkansas has a commission, and that there is a prospect of their being able to do their State some benefit if the Legislature can be made to see the great importance of an addition to the supply of fish food for the people.

The following letter is explanatory:

OSAGE MILLS, Ark., Oct. 29.
Editor Forest and Stream:
I regret that you did not receive my response to yours of Sept. 20 in time to insert the names of the Fish Commissioners of our State in your list: they are:
Gen. N. B. Pearce, Osage Mills.
Capt. John E. Hardison, Little Rock.
George Hornbrook, Little Rock.

*If we are not mistaken, the name "porgie" is applied on Chesapeake Bay, to the *Paripargus filer*, a fish called "moon fish" in New York and "fish on the Southern coast."
†The anchovy, *Engraulis vivatus*, is the so-called "spearing" of New York and the "silver side" of Peconic Bay.

The two latter were recently appointed to fill vacancies by Gov. W. R. Miller, and we hope to be able to get an appropriation from the Legislature, which meets in January, to enable us to do something. We will be glad to have the Commissioners of the different States send us their reports, and for this reason especially request that you insert the names of the Fish Commission of Arkansas in FOREST AND STREAM.
N. B. PEARCE.

EXPORT OF TROUT OVA FROM TASMANIA.—We are indebted to the secretary of the Salmon Commissioners for the following return of trout ova sent away during the last few days:—On the 19th inst., per Tararua, 2,000 to Blenheim, New Zealand; on the 21st inst., per Tasman, 2,000 to Sydney; and on Aug. 23, per Southern Cross, 12,000 to Geelong, 2,000 to Sir Samuel Wilson, St. Kilda, and 5,000 to Adelaide. The total quantity thus supplied by the Salmon Ponds establishment is 23,000. The demand for ova is increasing. In 1877 the quantity exported was 10,500; in 1878, 10,500; in 1879, 18,000, and this year, 33,000. Any colony requiring ova should apply to the secretary about the month of April or May.—*Tasmanian Advertiser*, Aug. 28, 1880.

A TERRAPIN LAW SUGGESTED.—In commenting upon the working of the law regulating the size of lobsters to be sent to market, the New York *Sun* thinks that something similar should be enacted to preserve the gelatinous terrapin from extinction. It says: "Since the excellent lobster law went into force restricting the capture of decapods less than 104 inches in length, the supply has been steady. The price has risen in New York, because the demand is ever on the increase in consequence of the increased centralization of population here. And it might be well to follow out the same plan with regard to terrapin, and restrict the capture to specimens fully six inches in length. Plenty of much smaller ones come into market, some less than four inches in length. These are not stewed, but are utilized for terrapin soup. A terrapin law would do no harm. The diamond-backed fellows from the Chesapeake fetch \$18 a dozen; those from further South are now fetching only \$10 per dozen."

THE USE OF MAGGOTS AS FISH FOOD. A few years ago we heard a great deal of the use of maggots as food for trout fry, and most all our fish culturists regarded it with some original discovery made by themselves, as it indeed was in one sense, but in looking over some old volumes of the *Sporting Magazine*, published in London, we find in Vol. 32, for the year 1833, pp. 42-375, it is recommended to suspend the leg of a horse or other animal over the pond and let the maggots drop. There is no doubt that much good food for fry can be got in this way from meat which is too "ripe" to be utilized in any other manner, if the pond is situated so that the odor is not offensive to those living near. The maggot is most excellent food for fish, fully as good as any other insect larva, and is perfectly clean in itself, as many other scavengers are, and even if fed to adult trout we doubt if any bad flavor would result. We were impelled to pen this paragraph to show that their use was nothing new.

THE OREGON SALMON FISHERIES.—From the annual report of the Oregon Board of Trade we learn that the salmon catch of the past spring and summer has exceeded anticipations, yielding 530,000 cases. In 1875 a catch of 232,500 cases was considered enormous; 1877 yielded 400,000 cases, and 1879 as many as 429,000 cases. This rapid increase shows the vast extent and financial value of the Oregon salmon fisheries. Of the half million and more cases packed this year, 211,522 cases were sent to San Francisco, and 229,241 cases were shipped direct to Great Britain.

LEGAL FISHING STOPPED.—The Union, N. Y., *Herald* says: Last week Agent Dodge went to Onondaga Lake, with trustworthy guides he made a detour of the lake and succeeded in seizing thirty-four trap nets. They are treacherous traps and give the fish no chance of escape. The captures were made in and about several points on the lake. More are buried in the water, and they will be attended to as speedily as possible. In addition to securing the nets Agent Dodge obtained the names of people who have been violating the special acts relative to fishing and hunting in and around Onondaga Lake, and they will have to answer for their work unless they make a short stop. Among the nets captured was one said to be owned by a game constable, who was elected to aid in carrying out the fish and game laws of the State. Everybody will rejoice that something is being done to protect the fish in Onondaga Lake. With their usual greed, the local fishermen in those waters had in little and big fish and leave the small ones on the shore to rot. They forget that this is virtually killing the goose that lays the golden eggs for them. If the State should stop fishing for their benefit they might begin to realize how foolish they had been in disregarding the laws intended to benefit the public generally.

THE LARGEST CLEVELAND, O.—The extreme northern range of the catfish is, you may be about certain, Lake Erie. Here it is a gamey fish, in hard and perfect condition of flesh, not exceeding, as a rule, the weight of twenty-five pounds, although sometimes a "Daniel Lambert" is taken weighing thirty to forty-five pounds. I never saw but one of the latter size, and it was taken in the usual way some years ago, by the hook baited with liver.

The catfish here in our waters, in season, is as fine a fish when properly cooked, "in every style," as any fish caught in fresh waters. The hotel, or any other table, can palm it off for lake trout, white fish, or even black bass, as I have seen done many times. The farther South you go the larger the fish grows, the softer its flesh is, and the more it tastes of the muddy water it inhabits. A catfish in the month of May, taken from Lake Erie, and stuffed, baked and baked, will satisfy the taste of any one who desires a good fish.

E. STERLING, M. D.

We are glad to see some one take up the cudgel for this fish. We are not familiar with the large ones the Doctor mentions as table fish, but the small "bullheads" (N. Y.), "catties" (Phila.), or "horn-pouts" of the Eastern States are, when of a quarter to a half-pound weight, of a high order of excellence when fried for breakfast, brook trout to the contrary notwithstanding.

FOREST AND STREAM GENERAL PASSENGER RECORD.—Chicago, Nov. 2. I would note the following persons en route to hunting grounds, over the Chicago and Northwestern Railroad: Mr. Catlin and son, Mr. Lancaster and Mr. Robinson, from Illinois, going to Section No 17, Mich. W. H. S.

Sea and River Fishing.

FISH IN SEASON IN NOVEMBER.

FRESH WATER.

Muskegon, *Esox niger*.
Pike, *Esox lucius*.
Pike-perch, *Perca flavescens*.
Yellow Perch, *Perca flavescens*.
Striped Bass, *Morone saxatilis*.
White Bass, *Morone chrysops*.

SALT WATER.

Sea Bass, *Centropomus undecimalis*.
Sheepshead, *Acanthopagrus ruber*.
Porgy, *Scorpaenopsis argentea*.
Striped Bass, *Morone saxatilis*.
White Perch, *Morone americana*.
Spot, or Ladyfinger, *Leiostomus xanthurus*.
Spot, Red fish, or Channel Bass, *Sparus atlanticus*.
Tautog, *Tautoga onitis*.
Walpole, *Polunius carolinensis*.
Weikist, *Cynoscion regalis*.

Sea Trout, *Cynoscion carolinensis*.
Shore Whiting, *Menticoccus littoralis*.
Croaker, *Micropogonias undulatus*.
Bluefish, *Pomoxis saltatrix*.
Spanish Mackerel, *Scomber innotatus*.
Cero, *Scomber regalis*.
Boito, *Sarda pelagica*.
Kingfish, *Menticoccus nebulosus*.
Snook, *Osmerus mordax*.

FISHING ON THE MATAPEDIA.

RECEIVING a pressing invitation from two of my old friends, Dr. Arthur Armstrong and Will Sutherland, well known "troutists," if I may coin the word, from Duloup, to join their party for a week's fishing, I was not long in replying in the affirmative, as I was sure of some good sport. The Doctor being thoroughly acquainted with the river, and the next day saw me at Duloup, assisting in the preparations for our excursion.

Our party consisted of the Doctor, Bill Sutherland, Colin Hetherington and self. Everything being in readiness we took the J. C. H. train to Mill Stream station, where we arrived at 5 o'clock A. M. in a terrible shower of rain; but as we expected wet work we did not complain of the early commencement, and immediately got the canoe ready and embarked our camp and other utensils and proceeded up the river to McKinnon's brook and pitched our tent. It was still raining with a vengeance, and, as the lush was so uninvitingly wet, we camped on an island where was plenty of drift wood; but it was a hard job to get that tent up the island, being composed of small stones, and driving the pegs in them was a wet task.

However we got things to rights, and as I was appointed "Cuisinier" I managed by the help of a little coal oil and wet cedar to get a good fire started, by which time Colly II. managed to land about three pounds of trout, which were soon simmering with a slice of pork, and we sat to breakfast and did it ample justice. I think tea in camp is far better flavored than boarding house quality in town. I may be mistaken, but it took a gallon of tea to supply our party at meal time, and they have been in the tea trade some time. Breakfast over and things straightened up, and rods got ready, we started up the river.

Good fishing may be done in a canoe if you can only manage to anchor it, but we were not wading, and wading while the current runs at the rate of fifteen miles an hour is no easy or safe task as the Doctor found out. He only weighs 225 pounds, and when he came down plump on the end of his back, he said, as he upended himself, "I'm too round to make an anchor." We are now one mile from camp, and only one dozen fish between the Doctor and I. We retrace our track, not by water, but along the beach, and on reaching camp, Dr. Bill and Colly there before us. They went up McKinnon brook and brought back nothing but wet clothes, which they were busily engaged in drying. All hands were disgusted with the commencement of our anticipated good time, but if they lost their temper over it they did not lose their appetites, and the day's catch was again consigned to the boys' pan.

Doctor said, casting his eye to the east: "Boys, we must move our tent; there will be no island here to-morrow!" And move it we did to the main bank of the river, and a beautiful spot we chose, just alongside of the railroad track, and an elevation that commanded a view of the river for a mile up and down. While the rest of the party were moving camp I made a raft, and, with the aid of some green withes and clothes-line, managed a rather cumbersome-looking vessel, but sufficiently buoyant to bear one comfortably, and which was stiffer than our bark canoe. By this time it was getting dusk, and the Doctor was roaring at me to get supper ready. They had made a good fire, and I soon had their appetites appeased. It was still raining furiously, but the tent was waterproof, and, lighting our pipes, we stretched out on our blankets, while Colly got his bappies ready and we soon had the "Campbells are Coming," "Mrs. McLeod's Reel," and a host more of Scotland's favorite tunes echoing among the hills. We then fixed the fire for the night, and rolled ourselves up in our blankets and forgot our disappointment.

Breakfast over we made another trial. The Doctor was ahead of me on the raft, as when I went down for it he had possession and was anchored about half a mile above the McKinnon Falls busily whipping away with better success than yesterday, so I proceeded down below the falls and was joined by Colly and Bill. The latter had sprained his knee and was unable to get up, and we could not use the canoe as it had a hole in it, so we hauled it up to dry till it could be lugged. We were sorry for Bill as he could do very little walking, but when he saw us hooking a few two or three pounders he started to join us. They say, "Tis an ill wind," etc.; so with Bill. He had not come twenty yards when he slipped, and down he went, and hardly down till up again and started for shore as if a shark was after him. When he reached the shore he felt his knee, and looked out at us. We ceased fishing to laugh. He slowly bent the knee and then straightened it out again, walked a few paces, and then started on the run to us with the exclamation, "Boys, I'll be busted, but it's all right again." The fall had, no doubt, put the sinew back in its place. Well, Bill had hardly got out to us—we wait deep in a good smooth piece of water—when we saw the Doctor and his raft approaching the head of the falls at a lively gait. "He'll be over the falls as sure as fate," said

Bill, and hardly were the words uttered than we saw the Doctor lay his rod down and then lay himself alongside of it, and he, raft and all, were in the rapids over the falls and alongside of us in about as short a space of time as I take to write it.

It appears his anchor line cut and he never noticed he was drifting till too late to try and pole ashore. "Wasn't that neatly done?" said he, and we thought it was, but would not like to try it. The Doctor lost his line, hooks and all his fish by his little cruise, but hung on to his rod.

The fishing not being very good we determined to strike camp, and seeing Tom King, the master for that section, going down on his "pumper" we made him wait and take our baggage down to Mill Stream and Colly and Bill went along with him leaving the Doctor and I with the canoe to go by river to join them. Doctor and I started, "but," says the Doctor, "we are not going straight through yet. I'll show you some good spots. We will try the pools at the Assamet-quaghu Bridge," and there we steered for, hauled the canoe up and tried the pools. First fish for the Doctor and a beauty of five pounds: next for me, not so large; and for two hours we were kept busy. The sky then brightened and fishing ceased, the doctor went ashore and stood on the bridge. We were fishing about one hundred yards from the foot of the bridge in still water, and I suddenly heard a shout, when I ran up the bank and shouted back to know if anything was wrong. "Come here and see trout as long as a railroad track," said he, and up I went, and it was a sight to make one wild. Just under the bridge the water is as clear as crystal and about six fathoms deep, all rock bottom; and, lying in shoals, one could see the trout without a perceptible motion, and larger ones than we had yet caught. We tried every fly, we had, but could not get a rise. I then got on a sinker and cut up a trout for bait and tried them with that. No better success, although I could see the bait alongside of their nose and rub it against their bodies. They would only give a wriggle to their tails and move out of the road. I then got around a ledge of rock out of sight, and putting on a piece of Bill Sutherland's red hankerchief, which he gave me before starting, as wings for a fly, I gave a cast and hooked my fish. The Doctor was watching the movement, and when I hooked it he got so excited, being afraid I'd lose



"FYSSHYNGE WYTH AN ANGLE."

[Fac-simile of Illustration in First Edition, 1496.]

him as the place where I was standing was very bluff and barely room to move, that he got shouting that he'd go round and help me, when his feet went from him and in he went, and I was very near having to fish out more than I bargained for; but he floundered around, and at last got ashore just as I landed my six pound four ounce fish, the largest of all our catch. Doctor was delighted at my success, as he did not expect I could land him without a net; but it took me some time to drown him, he fought so very hard.

We tried for over an hour at and around the same spot, but not a rise from one. We then concluded to strike camp, and about six o'clock we arrived, just in time to try Bill's cooking, which was excellent; had our after-supper smoke and wrapped ourselves in blankets.

Next day we went back to Assamet-quaghu bridge with the whole party and Dr. M. saw us back to camp with a total of thirty-three dozen and odd, exclusive of what we consumed, to bring home with us and when weighed averaged three pound six ounces. This is fine fishing on this river, but it is uncertain. As our party had decided to try Lake Malheur on our way back we struck camp next morning and took the train, but on looking over our stock of provisions we concluded to go straight through to Duloup, where we arrived at 4:30 P. M. well satisfied with our trip, although commenced under very unfavorable circumstances.

The Doctor was quite right about our first camping ground. The island, as when passing in the train where an island was three days before only water was to be seen. We had several rises from salmon grise but that was all, it was just as well, however, as they were out of season.

Quebec, Sept. 1880.

—Through the courtesy of Mr. J. W. Bouton we publish the above cut, illustrating a quaint book of which we spoke in last week's issue.

MR. SCOVEL GOES A FISHING.

IT was a gorgeous September afternoon, and I sat reading the *Times* under the lofty and leafy pines which grace my friend Stover's esplanade on the upper Delaware.

I had just read "Bodine's" brilliant and sparkling account of how that speckled trout had got away from him, and how "Bodine's" "lured the gentle tassel back." My mind reverted to my first day's fishing out in Indiana in Doughten's Creek, when I was sixteen years old, and O! what a joy it was to my untutored and somewhat savage mind to see the beautiful little sun-fish scattered on the bank, as I hauled them up as fast as they would bite, and as fast as I could jerk them in! If Cicero had any more exquisite delight with "histories" he would have been no more than I had with my sun-fish, at least history has been silent on that subject.

The "Bodine" trout still lingered in my mind, and I said to my friend Jordan H. Stover, who has the soul of goodness in him, that if I had appropriate tackle I would tackle on the sun-fish. He told me he knew a hole down by the mill where they most did congregate, and that I might take a bass or two.

The "booming" campaign had no more joys for me for a few hours, and Jordan was soon assiduously engaged in rigging me a horse-hair line from the tail of one of his Arabian steeds, which hitherto had only voyaged to Frenchtown or led exploring parties when hitched to a hay wagon to some remote spot like the "Singing Rocks" in the Happy Valley. Well, in one hour Jordan showed me as pretty a fishing rig as I had bought it at Kridler's.

The place under the pines deserves a word. Here I have rested for three summers with my household gods about me (board \$7 per week). To get here you must go to Frenchtown, N. J., 23 miles above Trenton, and a line to J. L. Stover, at Erwinna (two miles below Frenchtown, N. J., in Bucks County, Pa.), will bring our friend Jordan with a pair of Arab colts, well bred and well trained, to meet you at any train north or south.

I have derived so much pleasure from the *FOREST AND STREAM* that I feel like giving others the benefit of whatever sweet delirium can be had to all the sportsman's soul with joy without utterly emptying his pockets, unless, perhaps, he like that of Fortunatus or the devils which is said to have neither top nor bottom!

September and October are said to be the best months in which to catch bass, albeit my friend Major T. W. Walker, of the U. S. Army, astonished me with a four-pound bass he had caught with a silk line in the middle of August. My luck don't run that way, I am some on the luck, but not on the verge, but when it comes to big bass and sheepshead, I am not there. For sixteen years I fished wisely and too well for the sullen sheepshead at Bond's and in Grassy Bay and all over Absconm Tule; and caught one else-where; time, July; year, 1861. I had him embalmed, and ever after consoled myself with flounder and weak fish, and against my prowess in that direction I yield to no superior fisher in Barnegat Bay or Atlantic City, he the skipper, professional fish-catcher or amateur.

But we seem to wander from our mutton. As I sat looking proudly at my horse-hair line, I thought of my lamented friend Dr. Wm. M. King, now at peace with all the world. It was scarcely a year ago when the versatile Doctor bet me the best supper the Philadelphia Club could provide—and *his* *cuisse* is proverbial and unexceptionable. I caught more trout with a red worm, in a May afternoon in Broadhead's Creek, on the Delaware, Western and Lackawanna road, than the versatile Doctor did with his \$100 worth of "grizzly king" and two hundred other varieties of fly. I baited a "hawk-buck," ten years' old, with a shining fly-cent piece, and away we went, happy as the rose-fingered Aurora at her early bridal with the sky. My youthful traditions that a worm and a fish went together had been sorely outraged by the valiant Doctor's snort at the "red worm." Blinker, the country boy, gathered the bait, and gaily we "troubadours" started up the valley. Never did soldier at Chantilly, amidst the red rain of the enemy's artillery, perspire more or fight harder than I did for a string of speckled trout. It was a hot day—stream low, till I had to double to reach the shady spots, and had a dozen falls with my slippery gum boots.

The witty Doctor and myself arrived at the blue-painted hostelry almost at the same moment. It was wet from top to toe, and held out at arm's length a small club he had caught with a "grizzly" fly. Blinker cautiously opened his basket and spread out twelve speckled trout, none more than six inches. The Doctor looked daggers and spoke cross words—and, alas! the brilliant Doctor died before we had the dinner at the Club, at which I and a certain naval officer, a Rabelais in wit and a Talleyrand in diplomacy, Dr. D.—, and a Barnevall, and one poor poet mourned. But rest thy perturbed spirit, tired of the world—a true friend, if a bitter foe—there must be a place where thy soul can find the repose denied it here.

I started off toward the spot pointed out by Stover by the old mill. "Where the mill-wheel rolled right steadily." As I trudged along I recalled good old Izak Walton's words: "No life so happy and pleasant as the life of a well-governed angler, for when the lawyer is swallowed up with business, and the statesman is preventing or contriving plots then we sit on the cowslip banks, hear the birds sing, and possess ourselves in as much quietness as these silent silver streams which we now see glide so quietly by us. Indeed, my good scholar, we may say of angling as Dr. Boteler said of strawberies—"

"Doubtless God could have made a better berry than the strawberry, but doubtless He never did, and so, if I might judge, God did never make a more calm, quiet or innocent recreation than angling."

Once at the old mill I sat me down fifteen feet above the deep hole into which the dammed up waters of the Delaware poured.

It was 4 P. M., and a grateful shade diffused itself around me. A new "Blinker" I had gathered, in to find "crickets on the hearth" for bait had to be silenced with threats of effective applications of the butt end of my pole—"Quiet reigned in Warsaw."

No sooner had the crickets touched the oozing waters than something gave a well-defined tug. Cautionously I tightened my hair-line till I could see the glistening sides of a sun-fish larger than my hand, and I got a "game" fish, which I caught me ten minutes before I dared draw him up to my "perch."

This was awkward; so I climbed down below the mill wheel, shortened my line, and with every cricket I "baggied" a noble sun-fish till I numbered twenty-five.

Avoid my bait was all gone! My beer bottle, full of crickets an hour before, was empty—dry as a powder-horn!

I was at my wit's end. No crickets, and the bait ground was nearly a mile away. The boy from the swamp was equal to the occasion. He knew where a wasp's nest grew. A silver piece made his eyes stand out like saucers, and in three minutes he had the adolescent wasp ready for stringing on my hook. That was a new experience. Caustically I stuck a couple of infant wasps on my little hook, and let the horse-hair dutter. What is that? Something cowering through the water like a devil-fish; but I hung heavily on to my pole, vainly endeavoring to give my line additional reach. Suddenly I started a "monster"—a two-pound bass. Softly! Softly! I saved a little. I draw him quietly, breathlessly, lovingly toward me. Another flop. My legs dangle over the deep hole. I have nothing to hold on to. A sudden jump of the nimble bass clear out of the water. My horse-hair line gives way eight feet from the hook. I tumble into the water in my eagerness. Minding not the wet seersucker suit, I scramble out on the gravelly banks of the Delaware, and only know that my five-pound bass majestically darts down the shallow falls into which the pool empties into the deeper Delaware below, with a long line in his mouth. J. M. S.

BIG BLACK BASS—Monmouth, Illinois, Nov. 1.—I send you to-day by express a black bass caught yesterday. Please accept with my compliments. As I have seen several communications in your paper from correspondents bragging over minnows that weigh from five to six pounds, I thought I would send you a full-grown fish. The fish when taken out of the water weighed seven pounds and five ounces (7 lbs. 5 oz.). I caught yesterday, in six hours, forty-six (46) bass that weighed one hundred and eighty pounds (180 lbs.). When any of your friends that are good fellows wish to catch big bass, and lots of them, call on me and I will show them where they can do so free of charge.

Yours, etc., FRED. A. ALLEN.

The fish came in good order. Thanks. It proved to be a "big mouth," *Micropterus salmoides*.

AN ENCYCLOPEDIA—Mill Springs, Ky., Nov. 1880.—Recent mention of the speculation of a book in a fish recalls a circumstance which I have to the FOREST AND STREAM four or five years ago. "Old 'Hog' Weller," then one of State's experts or "professors," with a Frankfort reel, landed a six or seven pound pike near Livingston, on Rock Castle River, in the fall, and was superintending the dressing of his fish when a prominence about the middle of a side attracted his attention, and proved to have been caused by a well preserved hook and fragment of a line attached. On investigation he learned that his neighbor "Dilsey," who is quite sensitive to the charge of "slathering"—Dilsey does slather fearfully sometimes—had claimed to have had his line broken at the same pool by a while the previous spring, and when "Hog" exhibited them in Dilsey's presence he immediately recognized them, and located their loss without prompting.

KENTUCKIAN.

—Don't use stimulants, but nature's real brain and nerve food—Hop Bitters.

Game Bag and Gun.

GAME IN SEASON IN NOVEMBER.

Monk, All American.
Carolina, Blue-winged teal.
Fall, or Virginia duck, C. virginiana.
Squab, red, black and gray.
Hares—brown and gray.
*Reed or reed bird, *Dolichonyx oryzivorus*.*
*Wild Turkey, *Meleagris gallopavo*.*
*Pinnated grouse or prairie chicken, *Caprimulgus vociferans*.*
*Butter grouse or puceant, *Geopelia striata*.*
*Quail or partridge, *Ortyx virginiana*.*
*Sora, fall, *Porzana carolina*.*

*Woodcock, *Philohela minor*.*
*Black-bellied plover, *Actitis macularia*.*
*Long-billed curlew, *Scolopax longirostris*.*
*Turkey, or canvas back, *Streptopelia interpres*.*
*Red-breasted snipe, *Droptellus erythrorhynchos*.*
*Red-backed snipe, or ox-bird, *Tringa americana*.*
*Great northern diver, or marlin, *Morone chirocentrus*.*
*White, *Tringa septentrionalis*.*
*Tattler, *Tringa melanoleuca*.*
*Yellow-shanks, *Tringa flavipes*.*

birds generally, including various species of plover, sandpiper, curlew, water-creeper, snipe, phalarope, avocet, etc., come under the group *Limicola*, or shore birds. Many States permit prairie fowl (quinnated grouse) shooting after Aug. 15.

NOVEMBER SHOOTING GROUNDS.

QUAIL IN MARYLAND, VIRGINIA AND NORTH CAROLINA.

IN previous letters to the FOREST AND STREAM I have called the attention of sportsmen to the advantages of the National Capital as a place of rendezvous for those desiring good shooting. Of late years a trip to the West has been deemed the correct thing to go to, in fond of the pursuit of wild fowl or game birds. That there is a greater abundance of game in the Western States than in the East cannot be denied. I think, however, that sportsmen of the East, who have made the Western trip, will concede that their success in the lake regions and upon the prairies depends in great measure upon the character of the men into whose hands they fall when the hunting grounds are reached. One must know where game can be found in the West as well as in the East if good sport is to be enjoyed.

The question of expense is a vital element in the calculations of a vast majority of sportsmen. The gentleman who takes his vacation in the frosty days of October and November, upon the stubblefields or woodlands, must be able to reckon the cost of his amusement quite as accurately as he who lounges upon the beach at Newport or in the hotels at Saratoga during the sweltering mid-summer time.

There are field sports which can only be enjoyed by the rich sportsman who is as far beyond the reach of the ordinary mortal who loves a dog and gun as the elevated attractions of the Newport Polo Club. In the hunt, the aspirations of the youth who rides a stiff back at a county tournament. The successful bumpkin who crowns his sweet-heart Queen of Beauty at the country fair may enjoy himself vastly more, however, than he who drives the ball beyond his opponent's goal in the presence of the congregated belles of New York and Boston. The poverty-stricken sportsman, who kills a dozen ducks from an inexpensive blind at some good point on the Potomac, in like manner may enjoy his shooting vastly more than he who pays a Havre de Grace

professional \$40 per day to equip him with decoys, sink boxes and assistants for the destruction of innumerable canvas backs. Western shooting is an expensive luxury for Eastern sportsmen. If there was no game in the East there would be an excellent reason for going a thousand miles westward to find it. There is, however, magnificent sport to be obtained near home. There never was a time when game birds were well protected in Maryland, Virginia and North Carolina as at present. The quail, for example, as the bird is generally denominated in the South, is increasing in numbers. "Bob White" thrives best in the prosperous agricultural communities. He appears to follow civilization.

Quail shooting and chicken shooting cannot, in my estimation, be compared. If a man is shooting for results in bulk he will undoubtedly enjoy prairie shooting best. A chicken weighs more than a quail. On the 15th of August a chicken will rise as heavily as a crow, and is about as easy to kill as an oryx. The hunter stands upon a vast expanse of level ground. There is exactly a link to the quarry, the nearness of the prospect. After 8 o'clock in the morning the sun beats down with paralyzing effect. His shooting is virtually at an end until the shades of evening begin to fall. How different is quail shooting! There is first the accessory of a beautiful landscape. Hills, trees, water, and an infinite variety of natural colors. The air is sharp and invigorating. The hunter must exercise more ingenuity in the pursuit of the game. To be successful he must follow his dogs closely. When the coveys are found and flushed he must shoot rapidly and well to kill the birds. There is nothing slow about the quail. He is active and cunning under all circumstances. There are pleasant surprises almost always in store for the quail hunter. Following a covey into thick bottom he often stumbles upon a brace of woodcock. Not this, puny July woodcock either, but large, strong fat birds, oftentimes heavier than the fattest quail in the bag. Again, driving a covey into a marsh, the dogs may stand a stray jack-snipe whose presence in your bag adds greatly to the attractiveness of the contents. Now and then a rail quail will dart with the speed of an arrow from the clump of laurel bushes in which you expected to find one of the scattered coveys. If you kill the noble bird it will be a pleasure to boast of the feat when you sit down to a hearty dinner at the farm-house where you are stopping.

I shall not pretend to direct sportsmen to the exact localities where quail in abundance can be found. I know there are more birds in Maryland, Virginia and North Carolina this fall than in any previous season for many years past. It has been the general experience of Washington sportsmen that the greatest number of birds could be found near Federal Senator Vance, of North Carolina, recently informed a friend that there were "partridges" by the thousands in the northeastern corner of the State. Albemarle and Currituck Sounds, with their tributary rivers, inlets and creeks, water the counties of Currituck, Camden, Pasquotank, Perquimans, Gates, Hertford, Chowan, Washington and Tyrrell. In Virginia, birds are numerous in the bottoms of the Potomac, Rappahannock, York and James rivers. Besides the quail shooting season, the hunter may be interested in the shooting of these streams. There are plenty of birds inland also. If reports received from this source are true, but I believe true, water shooting to be more satisfactory. Besides the variety of sport, the cover is not so dense as on the mountain uplands.

The general State law of Virginia prohibits the killing of quail before November 1, although in some of the upland counties the season begins October 15. A general State law also protects every land owner's property from trespass, and farmers are not compelled to post their lands to derive the benefit of the law. The sportsmen of the most part are kindly and courteous, and a gentlemanly sportsman rarely refused permission to shoot upon their lands. Board can be obtained at farm-houses from \$4 to \$7 per week and at the village hotels from \$6 to \$10 per week.

Quail are more abundant in Maryland than for many seasons past. The Baltimore Sun of a recent date says: "This abundance several circumstances have combined to effect. Last fall the weather was so dry that the birds were found with extreme difficulty, even by the best of dogs, and much larger numbers than usual were consequently escaped slaughter. The succeeding winter was mild and the breeding season just past an excellent one, so no damage was done to old or young birds by natural elements, and the plentifulness of this fine bird resulting is generally remarked. The Messina quail brought to this country and turned out in the vicinity of Baltimore bred well last year, returned from their annual travels south and bred on the same grounds this year, and promise to be a decided acquisition."

The general game law of Virginia prohibits the killing of quail before Nov. 1, but many of the counties have passed local laws on the subject to which the general State law does not apply. In the following named counties the season opens Oct. 15: Alleghany, Harford, Montgomery, Frederick and Talbot. The season opens Oct. 19 in Anne Arundel and Prince Georges; on the 20th in Queen Anne and Washington. The general State law closes the season Dec. 24, but in some of the counties the season is extended to a later date. Rabbit shooting is permissible after Oct. 15. In Queen Anne County persons are allowed to shoot wild fowl from sink-boxes until a \$10 license fee. No wild fowl can be killed in Worcester County before Nov. 1.

There has been magnificent rail shooting on the marshes along the Patuxent and Potomac rivers since the 1st of September. At the last session of the Maryland Legislature the following law was enacted: "No person but a resident of Anne Arundel, Prince George's, St. Mary's, Charles and Calvert counties shall shoot or trap any water-fowl, snipe or oryx in the Patuxent River, its tributaries or marshes adjacent. Fine for first offense, not less than \$10 nor more than \$50; second offense, not less than \$25 nor more than \$100." The fool killer could not have been in Annapolis when this law was passed. If he had been the members of the Maryland Legislature would have suffered. State Senator Hill, of Prince George's County, who owns 1,200 acres of marsh on the Patuxent, at Hill's Landing below Marlborough, was sick when this prohibitory law was passed. He is indignant at the action of the Legislature, and has, I understand, invited friends from Baltimore and Washington to gun upon his marshes, telling them that he would protect them from the consequences. The law is really a dead letter. Sportsmen residing in neighborhoods outside of the counties named in the act have gunned upon the Patuxent marshes during the past month unmolested by the authorities. Oryx on rail have been plentiful. Three gentlemen killed 507 oryx, and sixteen blue wing teal on the half tides recently. Your correspondent and a friend killed 204 birds on one tide last week. We found the teal very scarce, only two, being killed.

Washington, D. C., Oct. 1880.

PASS SHOOTING IN MINNESOTA.

I REACHED Sauk Centre on the morning of Friday, October 8, at 1:18, where, at the depot, I found my friend, Mr. B., awaiting me, and within ten minutes we were placed at his door. The next morning preparations were begun early; our guns were brought out of their cases; flannel rags and oil were in demand. Such bustling activity brought forth derisive and sarcastic remarks from the ladies who were engaged in the more sedate subject of millinery and dresses. "Bless their dear hearts!" I wonder if the ladies it was possible to take such pleasure in seeing the sterner sex becoming boys again—if not in age and stature, at least in spirits and enthusiasm—as we do when preparing for a shooting trip. I believe they do.

In the afternoon we were saddling along at a good gait over the rolling prairie in a comfortable two-wheel wagon, drawn by a team of large horses—good travelers—the property of a neighbor who accompanied us.

Our personal and outfit comprised the following, to wit: Four adults, two dogs, one a pointer and the other a wire spaniel, formerly the property of Col. Gilderstedt of this city, four breech-loaders, ammunition enough to last, buffalo robes, and last, but not least, plenty of lunch.

We had not gone more than two or three miles when Mr. B. asked to stop a few minutes, as he fancied we could have a shot at some ducks. I looked all about me and could see nothing. The ducks were not in the air, but I was informed there might be some over the fence in that hole, hidden from view by a few trees not many rods from a comfortable looking farm-house. Clanking over the fence, and cautioned to be careful, I crawled as slowly and discreetly as it was possible for one weighing 192 pounds through the tall, rank grass growing in thick profusion about the edges of the slough, risking wet knees and muddy hands.

Laborious though the work was I felt the labor was worth all the pains, for, carefully raising our heads, we were rewarded by seeing a bunch of mallards fully ten rods off, feeding quietly on the wild rice that grows in almost every hole about the prairie; and, while our eyes were made glad by the sight, I could not help admiring the intelligent actions of the waterfowl. Nero, who, without a word from us, had leaped from the wagon the moment we did, and crawled as carefully through the grass as though he intuitively knew what was necessary. Starting the flock up, we each secured one apiece, and Nero retrieved them; but, so eager had he been, his excited nature could not restrain him from "chawing" one up rather badly.

We joined the wagon farther down the road, feeling we had made a good commencement.

We spent the night at a farm-house, and roused up early the next morning the other two of our party who went out on the farm to dig holes for a shoot at the geese, as we had word from the farmer that there were plenty about his farm, and who laughed at the hole digging, and "guessed he'd never get a goose if he had to dig a hole for them; it was too hard work." But the others persisted, and were rewarded by getting a pair of "honkers."

Fortune smiled not upon us, the other members of the quartette, though we carefully hid ourselves along the fence where the grass grew high, not 25 yards from the plowed field, when the previous afternoon we had surrounded a big bunch of geese. Our short-run decoys, though placed in a most alluring way, failed to act as a charm.

In regard to the wild goose shooting on the prairie, I consider the best way to procure a big bag is to have live decoys, and there is no telling what fine sport one could have. The weather had been and was still very warm; no rain had fallen for six or eight weeks, and all birds were very cautious.

We left the farm-house after breakfast for the Westport Pass, mentioned by "Dell" in his last letter to you, and there we had some sport.

Along a ridge that originally was the work of beavers years ago we distributed ourselves, screening our forms carefully from the gaze of the watchful ducks as they flew over in passing from one lake to the other. Some good shots were made.

Pass-shooting is exciting sport, particularly when the birds are stirring about. A low whistle from one of the party is the signal for attention, or the exclamation, "Mark! north! mark! south," puts you on the *qui vive*, and I consider no more exhilarating sport can be had than this kind of shooting. The two dogs were kept busy, and demands for drive and Nero were constant, and after two hours' shooting we secured our ducks, quite satisfied with the morning's sport.

Leisurely and heartily eating our lunch, we were refreshed sufficiently to seek fields and pastures new, and, driving toward home across the "breaking," a term applied to a tract plowed for the first time, came to one farm, where 50 rods off we saw a very large bunch of geese, and farther on a great regiment of sand-bill cranes, which with necks erect and motionless looked like soldiers on dress parade. They took the shot, however, and so we were disappointed.

Concluding that we might get some shots at their return, we made our preparations to receive them.

Our dinner had strengthened us for hole-digging, and we soon had our pits dug, but the cannon corned beef and dust had combined to make me so thirsty that I walked a mile for a drink of water.

Our laborious work was only rewarded by getting three sand-bill cranes, and as we had some twelve or fourteen miles to drive before reaching home we filled up the holes, and drove back to town looking like a couple of exhausted men. The farm recently plowed had blown into our eyes, ears and noses, and we were sorry looking white men, judging from the ejaculations of our respective wives.

I subsequently had my first taste of crane, and I confess the flesh is as good eating as wild turkey.

Our next expedition was in another direction toward Birch Bark Lake, where for an hour before sunset we had a lively scrimmage with the mallard and teal.

A strange visit to this lake—which must present a beautifully picturesque scene in mid-afternoon, and from whose turbulent depths of eighty feet great pickled and fabulously large black bass can be taken—would marvel at the immense flocks of "mud hens" or "hen bills," called down-east "pool dogs," that blacken the surface. These birds are not considered game, and are undisturbed by the sportsmen; in fact, they seem to understand they are free from molestation, and oftentimes approach within easy gun shot, and the very best ones could kill a dozen at one discharge.

We stopped all night at a cabin on the shore of the lake, and the proprietor, an old fellow named Steele, assured us that he believed he had exterminated the fleas, gave us his only bed to sleep on. At 4 the next morning he arose, built the fire, cooked about a peck of potatoes, ground before our eyes the coals beans which he had apparently saved for some grand occasion such as this, (the receptacle containing the

openly from one end of the train to the other. By examining those birds any shooter will see at a glance that they are all trapped birds. Things have come to a very low standard and the snarers have become very bold indeed, when to let you shoot on their lands the farmers will exact from the shooter before he begins the promise not to touch their snarers. I say, stop the employees of those railroads in the sale of those trapped birds, and the farmers and their boys will of their own free will stop snaring, as it will not pay them to send to the city one or two birds at a time. Before the first of November we all heard of the large quantities of quail there were, but when the season came those large quantities were not there. They had disappeared. Before the first of six weeks ago had from twelve to fifteen birds each did not have one-half of that number on the first of this month. What had become of them? The farmers themselves will tell you, very innocently, that they guess that their boys have been snaring them. A TRUE LOVER OF THE SPORT.

LABOR GAVE IN NEW YORK.—The *New York Times* has the following correspondence from Monticello, N. Y.: "The sportsmen and trappers that annually find both pleasure and profit in the portions of Sullivan, Delaware, Ulster and Greene Counties that are still in a condition almost as primitive as they were when the Indians held possession of the region, are now out in full force, seeking their favorite game, which, from the timid rabbit to the fierce bear, has not been more plenty for many seasons. The mountains of northern Ulster and the lower part of Greene, and the rocky hills of Neversink and Rockland Townships, in Sullivan County, are the chosen resorts of the bear hunter, while the ridges approaching nearer the Delaware boundary of the latter county, and overlooking or holding on their crests many of the lakes that abound in the country, are sought by the lover of the deer chase. Scores of sportsmen from New York City have engaged quarters at the well known backwoods retreats that exist only for the accommodation of hunters, and now that the election is over an influx of this class of sportsmen is daily expected. Monticello is the centre of a famous deer, bear and partridge region, and as the accommodations here in a way of quarters, dogs, guns and guides are everything that could be asked for, the number of guests to be driven to a drive of eight or ten miles to reach the hunting grounds, and many sportsmen remain here for the season rather than seek the taverns in the very midst of the ridges, swamps and swails. 'Dave' Avery, of the Mansion House, of this village, is a crack shot with both rifle and shot-gun, knows every inch of the woods, and is always ready to go after a deer, bear, fox or wild cat, as the choice of a visiting sportsman may be. Hunters in the Upper Delaware region may have an opportunity this fall to encounter game that only the oldest residents of the country remember hunting. There are well-founded reports that a panther has made his appearance in the woods along the Beaver Kill. Catamounts have not been so numerous and bold for years, and the dreaded lynx has made its presence known in the Black Lake region. The appearance of these animals, all deadly enemies of the deer, is certain evidence that their prey is here in unusual numbers this season."

PATTERNS TESTS.—It is impossible to fix upon any one pattern as a standard by which to gauge the shooting qualities of individual guns, because of so wide a diversity in the degree of choke. We have therefore selected the two extremes, a cylinder bore and a very full chokebore, and give below such patterns as good guns of each class should make. Between the two limits of 110 for cylinder and 240 for extreme choke most of our readers will probably find their records to accord with the divergence of their guns from these two bores.

Cylinder bore gun loaded with 14 oz. No. 7 shot should put 110 pellets into a 30-inch circle at 40 yards. An extreme chokebore gun, loaded with 14 oz. of No. 7 shot should put 240 pellets into a 30-inch circle at 40 yards.

A good choke bore, such as we prefer for general shooting, should put between 180 and 200 pellets into the same circle under the same conditions.

The patterns given above are with the following charges of powder

TWELVE BORE.				TEN BORE.			
6 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	7 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	7 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	7 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.
7 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	8 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	8 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	8 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.
8 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	9 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	9 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.	9 1/2 lbs. to 10 lbs.	... 2 1/2 dr. to 3 dr.

THE GAME LAWS IN MAINE.—The following letters came to us in the same mail. We publish them together. The letter signed "Bangor" is the best possible comment upon Mr. Smith's plea that the demands upon the Commissioners are beyond their ability to meet, and that plea is the best possible answer to "Bangor's" complaint. Perhaps by another year the people of Maine may be encouraged by the good already done to increase the appropriation and enlarge the facilities for coping with the work.

MOPANG LAKE, Me., Nov. 7.—*Editor Forest and Stream:*—We wish to let you understand that we have not understood that we shall readily extend to the utmost extent of our power and resources these laws against all parties, whether guides or principals, who shall be guilty of their infraction. E. M. Stillwell, Commissioner of Fisheries and Game, in last week's issue of FOREST AND STREAM.

These are brave words, but of what avail unless backed by action? These utterances only excite laughter and ridicule among the constant violators of the law, knowing as they do that nothing will be done. Why, right in the Commissioner's own city there are men who regularly resort every fall to the Lakes in Washington County to bound and butcher deer, and this season finds them pursuing their nefarious practices with a greater boldness, born of past immunity. More than three weeks ago a responsible person living near the scenes of the law's violation wrote to Commissioner Stillwell and his colleague to that effect, yet neither officer has put in an appearance nor sent a deputy to arrest the parties; so the slaughter continues and will continue till the deer are exterminated. These men are appointed who will do more harm than the paper pellets. Some of the deer and the slaughter can be formed from the fact that twice a week a team goes in from Bangdington (five miles distant) to the vicinity of Mopang and Pleasant Lakes and takes out the venison in the night, carrying it to Milbridge for shipment. Then there are parties at Rocky and Lead Mountain Ponds and Alligator Lake in the same business. The still hunters are doing what they can shooting hounds. Two have already been shot by parties. Thirty-five Brook and at Gray and Adams camp. To do anything, would ask the Commissioners of Fisheries and Game, what are you going to do about it? BANGOR.

STATE OF MAINE.—DEPARTMENT OF FISHERIES AND GAME.—Portland, Nov. 8.—*Editor Forest and Stream:* As an executive officer, I am opposed to this constant "tinkering," by special legislation, etc.—attempts to better the form of laws, at the expense of lessening their practical force. We are devoting our personal efforts and energies as commissioners to the enforcement of the good laws that we have, and devote our whole time to the work. We now have added to our duties the enforcement of the game laws. With the extensive territory and limited means that we have our work is a mountain before us. You will learn from our forthcoming report for 1880 that we have not been idle for a moment. With an uncertain appropriation of funds to depend upon, and a meagre one at the best. We have a great territory abounding with large rivers and lakes and extensive forests that yield abundantly of fish and game. You have in New York State no less than four officers at the head of the Department of Fisheries, and eight to execute the game laws. The work of those twelve gentlemen devolves upon two in Maine, and we receive a salary just equal to one of your game officers—utterly inadequate as a compensation for our time and work. The work of restoring our rivers and lake fisheries by fish culture, the construction of fishways and protection, and of enforcing all our fish and game laws, etc., etc., we are prosecuting with our utmost zeal and energy. I believe that the practical results in Maine are, beyond cavil, unexcelled in the United States or the world. Our report for 1880, will be issued in January. EYKRETT SMITH.

TENNESSEE MOUNTAINEERS.—Thomas Hughes has been down to Tennessee to found a colony, and this is what he has to say of the mountaineers of that country: "Most of these mountaineers, but not all of them, own a log cabin and a minute patch of corn round it, probably also a few pigs and chickens, but seem to have no desire to make any effort at further clearing, and quite content to live from hand to mouth. They cannot do that without hiring themselves out when they get a chance, but are most uncertain and exasperating laborers. In the first place, though able to stand great fatigue in hunting and perfectly indifferent to weather, they are not physically so strong as average English or Northern men. Then they are never to be relied on for a job. As soon as one of them has earned three or four dollars he will probably want a hunt, and go off for it then and there, spend a dollar on powder and shot, and these on squires and opossums, whose skins may possibly bring him in ten cents as his week's earnings."

BERKSHIRE COUNTY.—Stockbridge, Mass., Nov. 5.—Owing to the swamps and low lands being so very dry this season woodcock were scarce compared to what they usually are. Ruffed grouse about the usual number, but are to be found more in marshy tracts than in their usual haunts on the hills. Ducks at times common, shooting, but small numbers. Rabbits mostly black duck (*L. abietina*). The beautiful woodcock breed in this section quite common. Rabbits abundant, grey squirrels common, and in some of our neighboring hills quite plentiful.

It has always been a very rare thing to see or hear quail in this section, but this last season they have been quite common, especially in the spring and summer. Their genial cry of Bob White could be heard every day in different parts of our township.

Our game laws are well kept of late years. Were it not so with our great number of hunters and fishermen our game and fish would soon be annihilated. R. C. M.

AN UNUSUAL BAG.—Presholt, N. Y., Nov. 5.—Mr. Eugene Depew and myself bagged yesterday in this county within forty miles of New York thirty-seven quail, all fine, full-grown birds. All shot over my Irish bitch "Gussie," and all but two were short over points. W. H. PRIER.

FLORIDA ORANGE GROWERS.—New York City, Oct. 26.—*Editor Forest and Stream:* Could you kindly put a couple of young men in communication with any of your numerous contributors to the FOREST AND STREAM in regard to orange growing in Florida? We have read with interest the valuable work entitled "Camp life in Florida," but the book scarcely meets our wants; we should like fuller information as to the prospects of orange growing, and to know of the most suitable lands, also State Laws relating to purchase or otherwise. R. F. W.

CAMBRIDGE.—Oct.—Will you please answer through your valuable columns the following questions: What are the prospects of a young man going to Florida, to engage in the orange business? What part of the State is best adapted to the business in regard to healthfulness and profit? How long before one begins to realize any profit from the business? What is the amount of capital required to start with? What time of year is best to begin? Is there any book that gives reliable information on the subject? Please answer as soon as space will permit and oblige. FLORIDA.

Will some one of our Florida correspondents not one who has a grove to sell—give us some facts on this point?

CANADA GOOSE.—Whitstone, L. J., Nov. 8.—While "sailing" ducks election day on Long Island Sound near this village, I came upon a Canada goose, which, evidently tired from a long flight, was resting on the water. It allowed me to approach within about fifty yards before rising, and it had not got far when an ounce and a quarter of "B" shot overtook it and proved too heavy a load to carry. Before dressing it weighed 9 1/2 lbs. How does that compare with the average? Occasionally geese are seen flying over here in the fall, but shooting one is a very rare occurrence. My "bag" for the day consisted of, besides the goose, three ducks. TIM. BERDOOLE.

The bird killed by our correspondent was of about the average weight.

A CURIOSITY.—The large gun which is elsewhere offered for sale by Mr. Wm. R. Schofer, of Boston, has a history, and we advise you to consider purchasing it to get the story along with it. If we remember rightly, this small cannon was imported for use on Chesapeake Bay, but its terrific echoes awoke the righteous wrath of the sportsmen of that region, and the gun was incontinently stormed, captured and sent out of the country. Eventually it found its way to the Hub, and has there long been an object of open-mouthed wonder to the modern Athenians. If some of our wild-goose-plugged friends of the Pacific Coast want to preserve their traps we recommend Mr. Schofer's punt gun. The report would make an interesting ornament for a gun club room.

MARYLAND.—Dorsey, Del., Nov. 4.—W. G. Smith, trainer at R. K. Kennels, has just returned from a ten-days' hunt in Queen Anne County, Md. He reports an abundance of quails and a good number of woodcocks. Knowing the country as he does we are not surprised at his success in finding so many of the latter. For comrades and co-workers he had "Lothair," of Orange Valley, N. J., and "Fritz," of Cumberland, Md. Owing to an unusually large crop of acorns, among which is the pin oak variety, a choice article of food, quail were found more frequently in the woods than in the open. The rain which is now commencing may drive them out to feed. E. V. C.

HAMMERLESS GUNS.—Boston, Nov. 4.—I am about to purchase a fine breech loading shot gun, ten calibers, ten gauge, but an undecided whether to get one with or without hammerless. The mechanism of the hammerless seems simple and strong, and easier to keep free from rust, but I have never seen one in use, and do not know how they are liked. Again the action here seems short on all that I have seen, and I should think they would be more likely to get shaky. What of your opinion of them? Will some of the readers of FOREST AND STREAM who are using the hammerless give me their opinion of them through your columns? A. B. C.

We should be pleased to hear from those who have used the hammerless gun.

OHIO QUAIL SHOOTING.—Watson, O., Nov. 3.—I think your correspondents are mistaken when they assert that in Ohio quail cannot be killed before Nov. 15. The law of 1879 to which they refer was passed prior to the code. The code superseded—codified all laws in force January 1, 1880. One game law in the code supersedes the law of 1879, and repeals that law by implication. If the law of 1879 is in force, then after Nov. 15, then there is no close season, and quail may be killed all the year round as that law contains no prohibition after that date. The judge of our courts concurs with me in this view.

Quail shooting is fair, and some woodcock yet linger with us. H.

SPORT ABOUT NEWARK.—A local paper this morn'g up the reports of the opening of the New Jersey game season there. Quail were found abundant and in large flocks, the birds well-grown and strong to wing. Quite a number of broods were reported in Essex and Union counties. Two gentlemen from this city killed a dozen on Tuesday between Elizabeth and Roselle, and said that they felt plenty for breeding purposes. The grouse were unusually plenty in their mountain haunts. Woodcock are very scarce and no good bags have been heard of this fall, but the prospects are that the recent rains and mild weather may yet furnish some sport with these highly prized birds. Rabbits, our only ground game, hardly were out the promise held by the favorable season as they were not found to be any more plentiful than usual.

AN EARNEST WORKER.—*New York, Nov. 1.*—*Editor Forest and Stream:* The readers of FOREST AND STREAM will have noticed the article in your issue of Oct. 28, by W. Holberton, on "Sabbath Marauders" at Paskack, N. J. This is by no means the first evidence brought to my notice that Mr. H. is interesting himself to prevent the illegal depletion of game and other birds in this vicinity. We have plenty of sportsmen who have time and money to expend for associated efforts expended in regular meetings, big tag, trap-shooting, grand suppers, etc., etc., but here is a man disposed to do it in little actual work. I hope that not sportsmen alone, but all who feel an interest in the preservation of the feathered tribe in this section from the mercenary and wicked assaults of pot hunters and wanton butchers will lend him a hand. And as "fine words butter no parsnips," let that hand transmit a \$5 note for his campaign fund. H. H. THOMPSON.

QUAIL IN NEW JERSEY.—*New York, Nov. 5.*—Our efforts to stop shooting at Paskack, N. J., before the law went off were entirely successful, and the parties have not put in an appearance since. I regret to say, though, that during two days' shooting (Nov. 1 and 2) in Jersey, I heard but one story from farmers and others, and that was that there had been quail shooting going on for two weeks before the 1st. The wildness of the quail and small size of the beaves amply proved this fact. Some beaves would not let the dogs come within twenty yards of them, and the quail were quite plenty early in the season, but the "woodcock shooting" drove them out, so that there are not enough left at this early date to make it worth while going after them. W. HOLBERTON.

QUAIL IN INDIANA.—*Chicadee, Nov. 5.* Our prospects for small game—the only kind which we have—were indeed flattering. Quail were perhaps never so plenty. The season this year was particularly suited to them, being dry during their nesting and hatching time, and they are now well grown, strong and ready for dog and gun. Although our law has been off for a few days, I have as yet to see my first dead quail; nor have I heard any shooting. By rising about daylight any morning, I can course perhaps a dozen covies by their calling, and have in the last few days seen two or three covies a hundred yards of the house. I know of no place in Central Indiana where devotees of the gun can secure so good sport as here. Should sportsmen from abroad desire to make a call we will do everything we can to make their stay pleasant and insure plenty of sport. Water-fowl have as yet given us the go-by, but they are being very plentiful now. Black bass, since the cool days have set in, have been doing good work taking the minnow, for you must know that the fly is as yet unknown. LA BELLE.

THE BLAIR COUNTY METHOD.—A young man in Blair County, Pennsylvania, has discovered an ingenious and successful way to capture squirrels, dead or alive, without either gun or ammunition. His outfit consists of a set of climbers, such as are used by telegraph repairers, a sheath knife, a pack of fire-crackers, box of matches and a dog. The dog holds the game. The young man puts on his climbers, and goes up the hole in the tree, light a fire-cracker and drops it into the hole. When it explodes, the frightened squirrel rushes out into a bag held over the hole, or if he wishes to kill it he strikes its head off with the sheath knife; if he misses, the dog soon finishes it. By this novel contrivance he often brings in from ten to twenty squirrels a day. Large game is captured in the same way. Et.

CONSERVATION.—Pittman, Nov. 6.—Sportsmen of this section (Windham County) are told that quail and woodcock more plenty since the light rains, and are considered good hunting at this time, especially in the runs and small timber,

where hares live, and sit down on some log or stump commanding a runway and listen to the industrious little hounds until their near approach warns him to be on guard and not let the little quarry steal by unseen and unshot at.

The writer is fortunate in having both varieties of the hare within easy reach, and they can be hunted in winter when pointer and setter are useless; and many a day the coming winter will my pack of beagles make the woods ring with their noise as they follow the great white hare in his ghost-like flight.

N. ELWOOD.

THE CARE OF DOGS.

CHAPTER II.

HAVING provided a proper kennel, and indicated the general arrangement of its occupants, let us give them a "square meal."

Certainly everybody knows just what is best, and four individuals out of five will disagree as to bill of fare. How is that? Just this way. No. 1 keeps a dog, No. 2, a brace, No. 3, four or five, and No. 4, twenty or thirty. No. 1 advocates table scraps; No. 2, Spratt's biscuit, with milk, or soup made of bones from the butcher's shop; No. 3, oatmeal alternated with minced meat and corn meal mush; No. 4, corn meal mush, with meat and vegetable soup occasionally. All are well enough in their places, but it is not evident that each man speaks for his own particular case, without thought of the difference between it and the others. Would it not seem ridiculous to tell a man to feed his stock of twenty dogs on table scraps or Spratt's biscuits exclusively?

I take for my starting point a kennel of from sixteen to twenty, because you will get my experience with a kennel of twenty as healthy and fine-looking dogs as one would care to see (twenty is the average number of dogs coming and going continually), out of which I have not lost a single dog this year, nor is there a sick one on the place at time of writing (Nov. 3, 1890).

In feeding dogs it is an advantage to change the food quite often, thereby giving a relish and keeping up good appetites; always bearing in mind that in most cases food can be made to answer the purpose of medicines.

Mush once or twice a week in warm weather, remembering not to cook at one time more than enough to feed twelve, as it soon begins to ferment unless kept in a refrigerator. A good mush for all seasons, but especially for summer, is made as follows:

1 beef head or 2 large beef shins, 2 heads of cabbage, or 1 peck of turnip or potatoes, 6 onions, 1 teacupful of salt, 1 ounce black pepper. Cut the vegetables into fine pieces, remove as much meat as possible from the bone, chop it fine and crack the bone. Throw all into an iron kettle and add 7 buckets (8 quarts) of water. Boil one hour and remove the bones. Thicken to the consistency of cold soft soap with the following mixture: Corn meal 1 bushel, oat meal 1 peck, wheat bran 2 pecks. Stir in while the soup is boiling and let it continue to boil three hours longer. Do not let it scorch. Feed cold.

A good winter food is made thus: Put into the iron pot 1 peck of hominy, pour on it 4 buckets of water, and boil 1 hour. Chop up 4 lbs. fat pork (fresh) and 2 pecks of potatoes (skins on), put them into the pot and allow water to cover them, boil one-half hour and then stir in a handful of salt, the same of black pepper, and sufficient coarse wheat bran to thicken to make it stiff. Boil until hominy and potatoes will mash with a spoon, and feed moderately hot, say "pretty warm."

Plain corn meal mush, with meat fibrous or cracklin cooked in it when the latter article is not burned—as is often the case when it is not convenient to examine before purchasing—is very wholesome; but where skin diseases are concerned, avoid fat or cracklin, which contains more or less. Use in its place lean meat, neck pieces or other cheap parts. Better use no meat than fat. Feed cold.

As a staple article for all seasons I would recommend baked corn bread with cooked meat cut fine and stirred in before baking. The meal should be mixed with cold water, seasoned with pepper and salt, and baked (for a loaf two inches thick) one hour in a hot oven, turning the loaf when the top is browned, if bottom does not brown well. If there is any kind of surfeit, leave out the meal, giving plain corn bread alternated with well cooked vegetables, and where convenient, an occasional feed of fried fish. Feed cold. Except in the case of very young pups, do not change to fish bones.

Where dogs will eat almost anything and few will give occasionally a raw, ripe tomato, or two small white potatoes between meals.

Soup once or twice a week in cold weather is good; but soup in warm weather is a nuisance. It often sickens a dog and causes him to lose his appetite; easily spoils or sours by keeping over night, and, if fed in that state brings on diarrhoea.

Bones are of more importance than most persons think. Each dog should have a bone to gnaw, and a few small or thin enough for him to grind and swallow, at least once a week. As a mechanical agency they cleanse the teeth, strengthen the jaws and harden the gums. Taken into the stomach they contribute a large amount of phosphorus and lime to the bone, muscle and brain, and assist wonderfully in causing worms to loose their hold upon the intestines and expelling them from the bowels. The exercise and enjoyment which a dog derives from gnawing a bone are very beneficial to his health.

Fresh water, cold and clear, is one of the most important elements. It should be changed three times a day in summer, and once a day in winter, rinsing out or scrubbing the buckets each time. Warm, dirty, stinky water is almost as injurious to a dog as it is nutritious to a person. A man who neglects to keep up a constant supply of clean, fresh water is no more fit to have charge of a kennel than a monkey is to run a barber shop.

Dogs should be chained up at feeding, in order to see how each individual's appetite is, and to prevent fighting and stealing of the weaker or timid dogs' share.

Do not place the food vessel too far from the chained dog, and cause him to choke himself.

The quantity of food given to each, should be gauged by his or her size, condition, etc.; large dogs, and thin or poor ones needing an extra allowance. Is is often necessary to use a little petting and coaxing with choice bits fed him from the hand where the dog is off his appetite or naturally timid in company; and sometimes in the latter case, the only plan is to move him off by himself at feeding time and allow him plenty of time.

Care should be used to clear up all scrap which may be left, and no food allowed to remain about the beds or boxes. It will prevent unpleasant odor, and teaches a dog to eat systematically.

EVERETT VOX CUTLER.

CURRENT DOG STORIES.

V. B. M. Cobb, the possessor of extensive pastoral interests in this section, has a shepherd dog that discounts the majority of the canine family for faithfulness and studied care to please a master. The dog is seen, less his inclination to set than to gratify her master, and so sensitive is she that any manifestation of displeasure on her master's part at her behavior appears to amaze her exceedingly. About six weeks ago Mr. Cobb left for California, leaving this dog with others in the care of the herder. He also turned his mind on to the range, to pasture at leisure until he returned. When his sheep were gathered about the camp at night the dog discovered that her master was absent, and seemingly over this fact she grew very anxious and uneasy. The herder observed this restlessness on the part of the dog, but supposed that she would be all right next morning. When morning came, however, the dog was gone. A few days subsequently the herder discovered her on the range with the male and succeeded in inducing her to follow him to camp, where he fed her. She again disappeared. Mr. Cobb was absent about five weeks, and when he returned he repaired to the range to get his milk, which was also a dutiful animal, and to his amazement and relief he found the faithful dog in company with his faithful donkey far out on the range, apparently contented and happy companions. At the sight of her master, however, the dog became perfectly frantic with ecstasy and manifested her maddened rapture by actions that were as easily comprehended by him as though they had been spoken in words.—*State Line (Cal.) Herald*.

VI.

Animal instinct of a very high order was exhibited at the Bulldog ranch in Sunday, Mr. Physick, of the city, was there with a fine pointer dog. All hands were seated at the dinner table, when at once the dog went up to his master and commenced whining. The attention of the master was attracted to the dog and turning around he asked him what he wanted. The dog reached up and dropped a gold piece in his hand that he had picked up somewhere. Mr. Meyer recognized it as one that had dropped from his vest, but knowing of the loss until the dog found it. *Dendwood (Ind.) Times*.

VII.

As an evidence that whisky is an infallible antidote against poison, we will state that Mr. J. W. Jackson, while out on the prairie some few days ago with his fine-blooded hunting dogs, had one of them bitten by an enormous moccasin snake. The reptile fastened his fangs on the edge of the dog's tongue, from which a terrible stream of blood issued. Such was the force of the virus that the wound inflicted became instantly black, and the dog's tongue and lower jaw had commenced swelling rapidly and alarmingly. The owner, having with him a flask of whisky, lost no time in pouring down the animal's throat about one-half of it. As soon as the whisky reached the dog it was stretched out as dead, but he was only drunk, as he soon revived from his stupor and was seemingly as well as ever. The place struck by the snake rotted and fell out.—*St. Laundry Democrat*.

VIII.

Last evening, as the through mail on the Baltimore and Ohio Road was passing Alpsville, a dog strayed across the track. The pilot of the engine and the engineer supposed that it had been ground up by the train. When the engine reached the city the fireman was surprised to find the dog seated on the ash-pan under the furnace. The dog did not seem to have been severely injured by the pile-up, and the train was hurt from its back during the long ride of twenty-one miles on the ash-pan. This morning the canine appeared quite frisky, and was sent back to its owner at Alpsville.—*Express*.

IX.

Policeman Charles Egolf, of the Twenty-second district, who patrolled that dismal part of the Twenty-ninth ward lying around Nineteenth street and Indiana avenue declared that "Sugarfoot" is generally accompanied by the station house bloodhound "Nig." This was an advantage to him on Friday night. Egolf found John Braman beating his wife about 10 o'clock, and attempted to arrest him. Braman kicked the dog and the woman and went to the roughs gathered to Braman's assistance and in a trace Egolf was down and being vigorously beaten. Then the bloodhound came into play, like another dog of Montargis and other celebrated hounds of history. He dashed into the crowd, bit right and left and kept the assailants at bay. Braman and his wife were rescued by the police station, his four-legged auxiliary limping along on three feet and with a couple of broken ribs. Egolf felt fainting upon the ground and was taken to a hospital, and his wife was badly fractured, but not dangerously, and that his face was badly cut. Braman appeared to have been driven by a sausage machine, he was so gashed up from Egolf's blackjack. Yesterday Braman was given a hearing by Magistrate Severn and committed in default of \$1,000 bail.—*Philadelphia Times*.

X.

A BAD JIBED.—The following story comes to us well authenticated: At a certain club house in Boston there was kept in the billiard room a parrot which was so tame and such a favorite that it was not confined to its cage, but was allowed the liberty of the room, and was often seen perched upon the furniture or wandering about the floor. On one occasion, when the bird was seated in one corner of the room, a gentleman, a Mr. B., entered, followed by his dog, whether a pointer or a setter we do not know. The dog after a few moments winced the parrot, drew on it, and finally stood fast. The bird, which had been up to this time apparently oblivious of the presence of the canine, now turned its head slowly and in tones expressive of the utmost contempt said, "Go home, you darned fool." The dog started, looked, and then turning tail, slunk out of the room. It is said that although up to this time the animal had been a splendid hunter, he would thenceforth never point a bird.

GUESTS EXPECTED AT VINCENNES.—The following gentlemen are expected at Vincennes during the trials: Mr. Luther Adams, Boston; Messrs. J. W. Munson, St. Louis; D. Sanborn and A. H. Moore and party, Phila.; C. H. Raymond and party and Chas. De Ronge, New York; James Moore, Toledo; J. H. Dew, Harry Bishop, E. C. Sterling, St. Louis; H. L. Smith and Brother, Strathroy, Ont.; Chas. H. Turner, St. Louis; Dr. Mc Dermott, Cincinnati; also a number of prominent sportsmen from Boston, Chicago, Pittsburgh, Toledo, St. Louis, Dayton and Cleveland.

NATIONAL AMERICAN FIELD TRIALS' CLUB MEETING.—The annual meeting of this organization will be held at University Hall, Vincennes, Indiana, on Monday evening, November 15, at 8 o'clock.

THE NATIONAL TRIALS.—Vincennes, Ind., Nov. 6.—Already all the rooms in the Grand Hotel, which is one block away from University Hall, are taken, and the meeting place is so engaged, and the other hotels, the La Platte, Union Depot and Central are certain to have their quota of sportsmen, Mr. H. M. Short, who handled several dogs at the late Penna.

State Field Trials, is seven miles away from here having excellent sport. Mr. C. B. Whitford is also in the neighborhood getting his trials in trim.

EASTERN FIELD TRIALS.—We are informed on the authority of Dr. H. F. Aten, President of the E. F. T. Club, that there is an abundance of quail on Robin's Island, sufficient to ensure a successful meeting whether others are obtained or not. A meeting of the club will be held this afternoon at 3:30 p. m.

SOME MASSACHUSETTS DOGS.—*Ashefield, Mass., Nov. 5, 1890*—*Editor Forest and Stream*: I have been shooting this fall over Cloudsford by Afton, and litter sister to St. Hammond's Thistle, and owned by R. E. Sabin, of West Springfield, Mass. She exhibits fine nose, and great speed and endurance for a pup of seventeen months. Must also make mention of two or three other of my particular "pets." First comes Rex, a pure Laverack, one year old, by Lathrop's Dick, out of Lathrop's Luna. He is owned by F. H. Fuller, of Springfield, Mass., who has also lately purchased a dog, Rex is a king among pups, and if he is kept up to the "scratch" as he has started he will give the "cracks" cause to look to their laurels at no very distant day. Next comes Doctor, a six months old pointer pup out of Lathrop's Kate, and a remarkably promising dog every way for one of his age. He is owned by E. H. Lathrop, Esq., of Springfield, Mass.

By the way, did you ever hear a dog talk? I have an English setter owned by G. W. Gunn, of Springfield, Mass., but will talk and hold a big grouse in his mouth at the same time. His name is Lark, and I have dubbed him "Old Hootsey" from his quaint, hoarsest, though he is but a pup. I was out with him Wednesday when he came to a point by a hemlock thicket in the alders I passed quietly around to the other side and flushed a grouse and shot it. I sent him after it, and he had just picked it up and taken a few steps toward me when he suddenly stopped and made a rigid point to the right. As there was no mistaking the point I let him hold it a little, and then took a few steps in that direction, when I flushed a grouse which rose above the bushes and passed directly over Lark, and when it was about forty yards distant it passed a little opening, and I cut it down. Lark stood staunch as a rock, but turned his head and watched the bird until it fell, when he gave a perceptible start, and whined a few times though he did not stir from his tracks or offer to drop the bird in his mouth. I let him stand a little, and then ordered "fetch," when he came in promptly with his bird, but several times on the way he turned his head toward the fallen bird, and whined, saying in the purest dog dialect, "Of course I should obey orders, but I am most awfully afraid that we shall lose the last bird." However, I had him come in and sit up and hold his bird about the usual length of time, and then allowed him to retrieve the other bird, which he joyfully did. When remonstrating with me the expression of anxiety depicted on his countenance was ludicrous in the extreme, and at the same time very flattering to the dog's future prospects. It has been very dry here until lately. However, by plenty of hard work I have secured fair bags of woodcock and grouse the entire season. Grouse are plenter than last year though they have begun to packs which of course means the day's bags more variable than when they are scattered. The shooting rather improves as cold weather drives them out into the sun. REFFED GROUSE.

WHAT IS A COCKER?—*Editor Forest and Stream*: I am much pleased indeed to see that Mr. G. D. Macdonald has taken a step in advance of other cocker spaniel breeders in his endeavor to get at a standard by which they may be judged and bred up to. I would be very sorry if his very laudable attempt should be frustrated by breeders themselves. There is a large number of cockers, and consequently what a cocker should be like and back up their opinions by showing wherein their ideal spaniel is superior to all others, not by pitching into each other and their dogs. It is all moonshine, in my opinion, to say that one man's dogs are half King Charles and another man's English water spaniels (if there is such a breed). We will never come to anything definite in this way. Let them preface their remarks by saying that the modern cocker spaniel is a "juongrel," which no one can deny. There is a list of almost every breed of field spaniel in them except the climber, consequently we have the most curious colors—liver and white, liver and tan, liver, black and tan, black and white, black. It is a well-known fact that if the lemon and white is crossed by any other breed of spaniel the lemon color is lost and that liver color takes its place. The old Welsh cocker, lemon and white, is no doubt the foundation of the modern cocker, but as we rarely ever get that color it is a sure indication of a cross.

I have written this to endeavor to show that because a cocker is not certain of weight it does not necessarily follow that it is not a cocker. What Mr. Macdonald wants, and I place myself in the same line, is to know what the various breeders consider the very best style of dog of this particular modern breed. Hugh Dalziel in his work gives two classes, the black cocker and the cocker. I think he is quite right; the black cocker is a much larger dog than what is now almost universally considered to be the size of the modern cocker.

To repeat myself, let the various breeders and fanciers of modern cockers go to work and describe in every particular, give the weight and measurements of the breed, length of body, height at shoulder, length of ear, position, size and shape of eye, description and character of hair, and all other points necessary to make up a standard. Then I would suggest that the Kennel Editor or other impartial authority should analyze what has been written and give the result, for we may be sure that no two writers will agree on this important subject.

I will give some future time give what I consider the proper size and shape of the cocker. Although not myself a breeder I take a great interest in the merry fellows, be they sixteen or forty pounds.

LONDON, Ontario, Nov. 7.

THE DOG-DEALING ENGLISH CLERIC.—The dog-dealing clergyman is a type of the amateur pugilist. He often breeds some rather uncommon kind of dog, possibly a species of wolf-blood, the progenitors of which he purchased during his travels in the East, perhaps at an Armenian convent. He invites inspection of these interesting animals, and the intending purchaser makes a pilgrimage to the hermitage of the clerical breeder. This he finds to be an unusually snug country rectory, looking the perfection of all that can possibly be desired in a well-kept house. Pictures of the Holy Land hang on the walls of the drawing-room, and an oak *prie-dieu*, in a little recess lighted by a stained glass window betokens the devotional habits of the family. The divos

ward collision bulkhead, constructed of like plates with angle iron supports of 2 by 2 by 1/4 inches, placed two feet apart. This bulkhead extends up to the water line of 8 feet 4 inches. A similar bulkhead at the stern is placed about the cabin. The keel is of white oak, 8 inches wide by 12 inches deep. The planking is of white oak, 6 by 3 inches, and fastened with galvanized iron bolts at each frame, the heads of the bolts being properly sunk. The deck will be of white pine, 3 by 3 inches, properly seasoned, free from obstructions, and fastened with galvanized iron bolts. The rigging will be of yellow pine, 4 by 9 inches, to the trunk cabin, and of oak, 3 by 6 inches, for all scuttles and hatches. The stanchions will be of locust, 3 1/2 inches square and 3 feet apart at centres. The rail, of oak, 7 by 3 1/2 inches, scarped and fashioned after the style of the "Yacht" design, will be 16 feet high. The masts being 56 feet each from hounds to step. The bowsprit will be 20 feet long, and fitted so as to reshoot with facility.

Her engines are of the vertical compound type, having three cylinders, one of 16 inches diameter and two of 26 inches in diameter, with a stroke of piston of 24 inches. Steam will be supplied by one tubular boiler, 9 feet 4 inches in diameter and 14 feet long. It has two furnaces of steel. The propeller will be 7 feet 6 inches in diameter, with a pitch of 12 feet. The internal arrangements of the yacht will be exceedingly comfortable. The saloon will be 16 feet long and entered aft by a spacious companionway, on either side of which will be roomy lockers. Sofas will be provided in the saloon, and large linen, gun and bath rooms will be within easy reach. There will be four staterooms forward of the saloon. The starboard stateroom is designed for the owner's use, will be 6 feet 6 inches long, while those on the port side will be 6 feet 3 inches and 6 feet 7 inches respectively. The galley, officers' quarters, mess-room and forecabin are of an ample character and in perfect keeping with the size of the yacht. The fittings of the saloon and the mess-room will be neat and comfortable. A clear launch will be furnished the yacht. The pilot house will be 12 feet long, 8 feet 6 inches high and 9 feet wide.

This yacht will be a handsome addition to the steam fleet of the New York Yacht Club. She will be finished during the winter and turned over to her owner ready for service before the early spring days. Next summer she will probably join the club in its annual squadron cruise, and if there is a steamer race out of Newport or New Bedford harbors she will not doubt be among the contestants.

REAL YACHTING.—The 80-ton yawl Falcon, Mr. E. F. Knight, left Southampton, England, during the latter part of August for a cruise to South America. She arrived at Porto Alegre, Rio de Janeiro, Sept. 21, having left Funchal, Fayal, on the 18th, making the run of 1,040 miles in less than eight days. The yawl experienced strong northeast winds, and one day it blew a gale from that quarter. She carried spinnaker and topsail all the way, and was designed for the owner's use. Her crew are all Americans. The Falcon left Porto Grande for Rio Janeiro Sept. 28, the distance to be made being 2,619 miles. Her crew are all Americans, and consist of the owner, Capt. Jarden, Mr. Andrews and Mr. Arnan, also a boy shipped at Southampton.

KEMP'S YACHT DESIGN.—We are informed that hereafter Trenton, N. J., and Square, will by contract, sell Kemp's popular works at London prices. "Yacht Designing," will be 4 for 1. "Yacht and Boat Sailing," for 26. The latter book, besides being the most complete and abridgement on fore-and-aft seamanship, is replete with details of small yachts, how to build them, etc., something which the title does not imply. The works are standard, and give expression to the observations, collections and investigations of one of the most experienced yachtsmen of the day, who is besides a thorough sailor, draftsman and mathematician.

IN A SEAWAY.—A correspondent who has seen the new "90," Southampton, in bad weather says she is a grand sea-boat, and throughout the season has not dipped her bowsprit. Her dimensions: Length on water-line, 34 feet; beam, 16 feet 6 inches; draft, 12 ft. 6 in. Her displacement is 140 tons. This testimony goes far to prove the soundness of Mr. Dixon Kemp's proposition that sea-going qualities are benefited by length, depth and large displacement. The beam is not a factor in the matter, but rather the reverse. This coincides with our own experience in different types, the beamy boats being the worst and slowest in rough water, just where the line is to be drawn is, of course, hard to say, so that depends upon other co-relative elements.

A YACHT CLUB FOR HAMILTON.—It is to be hoped that the following intimation in the Hamilton, Ont., Spectator will soon take actual shape, and one or two clubs be added to the swelling list hailing from the lake ports:

"It is expected that a yacht club will be organized here next season, and it is certain that one or more of the celebrated flyers built by the Earl of Trenton, will be added to our fleet. The citizens generally are very anxious to have yachting in the lakes, and we may expect Hamilton to make a good show at the grand regatta which the Royal Canadian Yacht Club propose to hold at Toronto in 1881."

THE ORIGINAL ROY.—The first modern canoe was built for McGregor by Scarle & Son of Lambeth. She was principally of white cedar decking. Length, 15 feet; width, 28 inches, and 9 inches deep. The beam is 2 inches of water. The paddle was bladed, 7 feet long. The well was elliptic, 54 inches long and 20 wide, and a Macintosh cover served as a protection in wet weather. She weighed a little over 80 pounds. In this boat McGregor has won the Meuse, Sambre, Rhine, the Danube and Seine, completing a cruise of over a thousand miles without serious mishap to the canoe.

POINTS IN CANOERING.

Editor Forest and Stream.—I AGREE perfectly with the "McGregor" in his remarks about canoeing, if he refers to the double-bladed paddle. As to the single blade I abjure it; puts the working muscles askew, and there is too much lost power and too much heaving. Oars are the thing to go ahead with if you want speed of course, but the way to make a canoe trip, for comfort, pleasure or sport, is to go as you look, with the motive power equally distributed and easily applied. And as to gunning on water it is about perfect. More than that, I have laid the paddle asthward-ships, raised the gun, and cut down an unlicked duck before it could get a dozen yards start. The only valid objection I ever heard to the double blade is that as you raise and lower the blades alternately there is a constant dip of the water that eventually wet everything in the canoe. I never tried to hear this objection, but a gentleman in a canoe at Blue Mountain Lake, I answered the objection by handing him my paddle for inspection. He took one look at it and handed it back, remarking, "That kills the last objection to the double blade."

As there may be a few canoeists who do not know how to flank this dripping easily, I will explain: It is simply two pieces of solid upper leather, cut so as to fit around the stem in the shape of funnels, opening toward the blades and fitting tightly in the centre. The one who can use his hands can fit them. They should be long enough to blade to clear the gunwale, and not so near as to dip in the water. A little judgment will place them aright, and your canoe will go through an all-day trip dry as tinder.

Also one of your correspondents is a strong advocate of the canvas boat. Now, I do not go back to the era altogether. It is portable, light, buoyant, and very handy in trapping or gunning, and an excellent boat in which to go a fishing. I came near taking one into the wilderness last summer, but the lightest Messrs. Osborn and Chapin could furnish weighed 20 lbs., and the canoe I finally took was a cedar one, which weighed 26 lbs. On the water, on creeks, bays, pup-holes, etc., the canvas boat is good, but don't take her into the northern wilderness. She has been used there, and the guides say she is utterly unfit for the lakes. When the wind is at the back, it takes you a long time to be gone, and in case of an upset, it takes you a long time to be gone. You are left sprawling on the water like a broken-legged frog; whereas any cedar will keep your head above water until you can make the shore.

If you contemplate an extended trip by river and lake, with carries at frequent intervals, get a cedar canoe as light as is compatible with your own weight. Always rig her to carry on a neck-yoke, and have it made as light as possible. The average neck-yoke used in the wilderness is just twice as heavy as it need be. Have a light, strong cord for a painter, and, when on the larger lakes, make the line fast to your knapsack or blanket roll, and tie the end around the guard of your gun. Reason why: Any man who travels a few miles in the North Woods, and sees the immense number of upturned trees, will infer that furious gusts or whirlwinds are not infrequent there, and the inference will be correct. Now, you might go over a great deal of water without an upset, but you are liable to it any day.

Suppose it comes—unexpectedly, of course—and you are organized for it, as above mentioned. If your gun and camp-kit were loose they would all disappear at once and forever. The canoe would blow away from you at a hopeless rate, giving three yards while you were swimming one, and you would have only the paddle and your hands with which to make the shore. But if you have taken the one minute necessary to make your damage fast to the canoe you are safe. The gun will weigh little in the water, but it will hold the other duffel under, and the whole will act as a storm anchor. The canoe will move very little, and if you can swim ten yards you may keep your head above water for hours. Help will come; or, if not, and you become tired and beaten, cut the line and paddle ashore with your hands. With an open canvas or paper boat, or, worse than all, a metallic boat, you would lose your traps and most likely drown.

NESMITH.

PUBLISHER'S DEPARTMENT.

—Holabird Shooting Suits. Uptegrove & McLellan, Valparaiso, Ind.

—Sportsmen would do well to notice new Adv. of Wm. R. Schaefer this week.

—Robust and blooming health in Hop Bitters, and no family can afford to be without them.

—Attention is called to Adv. of Vitalized Phosphates. It is considered very beneficial for the brain and nerves.

—Mange-cures, or no pay. Trial box mailed for stamp. Hepworth, Druggist, 256 Madison street, Brooklyn.

There will be a sale of about 40 Sullivan and Powell & Schilling line Beach Loading Double Guns, at auction, by Barker & Co., 37 Liberty st., on the 23d. For full particulars see adv. next issue.

—The handsome firearm catalogue ever published is that issued by Messrs. Smith and Wesson, descriptive of their revolvers. The circular is illustrated with lithographs, and is a credit to its publishers.

—Mr. Chas. Ritzmann, of this city, has a fine display of choice guns and sportsmen's equipments, and a call upon him will repay the time spent in looking over his stock. Mr. Ritzmann is situated uptown, and deserves commendation a liberal share of the patronage of New York sportsmen. See his advertisement elsewhere.

ANSWERING ITS READERS.—An alarm of fire at midnight is a startling thing, but not half so startling to many who hear it as would be the sudden knowledge of their own dangerous physical condition. Thousands of thousands are hurrying to their graves because they are carelessly indifferent to the insidious burdens of disease and the means of cure. It is the mission of Dr. H. Warner & Co., with their Safe Kidney and Liver Cure, to arouse men to a sense of their danger and cure them. —*Memphis Appeal.*

Answers to Correspondents.

No Notice taken of Anonymous Communications.

N. J. D., Philadelphia.—See our game columns.

C. R., Curto.—The arm is accurate up to 300 yards.

L. A., Applebackville, Pa.—Head game columns of last issue.

A. B. D., New York City.—Take your terrier to a dog fancier.

O. E. O.—Write to the National Wool Growers' Association, Boston, Mass.

N. S. S., Meadville, Pa.—Write to Scott & Co., 146 Fulton street, New York.

H. M., Astoria, N. Y.—Watch the reports in our columns devoted to shooting.

R. G.—We have been informed that the "visible effects" are already outweighed by eager claimants.

J. R. W., Norvell, Mich.—You can obtain the fishing lamp of any of the dealers in sportsmen's goods.

READER, Attleboro, Mass.—To polish your gunstock use flint or sandpaper, then emery, oil and the palm of your hand.

T. M. D., New York.—We have heard of the guns, but have never examined them and know nothing of their merits.

TREBLE, New York.—For robins load your 12 bore with 3 drs. powder, 1 1/2 oz. No. 10 shot; for squirrels same load No. 6 shot.

A. V. De C., New Bedford.—Thanks for the map. We have added it to our list. The island ought to make an excellent gunning park.

RAMROD, Mt. Vernon, N. Y.—The name is not that of a manufacturer, but it is put on the guns as a trade mark. The weapons are considered good.

A., Pittsburg, Pa.—We believe the gun to be safe, but do not vouch for it. 2. Your load might be increased, say to three drams. 3. Yes. Send us the reports.

SUBSCRIBER, Chicago.—I. We answer your inquiry by reprinting in our game columns the pattern records published last winter in this journal. 2. See advertisements of single-barrel guns elsewhere.

W. C. E., Chicago.—1. Perhaps an advertisement would call attention of a buyer for your back files of FOREST AND STREAM. 2. You can probably find Maltese kittens by looking around in Chicago bird and animal stores.

G. W. B., Biddford, Me.—We have never heard anything but praise of the gun you mention, and we believe it to be safe and reliable, when properly loaded. We are in frequent receipt of letters expressing satisfaction with the arm.

W. S., Waterbury, Conn. I have often seen in unweaned animals stuffed with their tongue showing, and they looked good, too. Can you tell me how these tongues were made? Ans. Such tongues are usually made of wood, though sometimes, in large animals, they are skinned and stuffed.

J. E. L., New York.—My dog, a large mastiff, has, I fear, canker within the ear. The crevices are discolored by a black discharge and the dog frequently shakes and scratches his ear. Ans. Keep the ears clean with warm water and castile soap, and use as a lotion dilute lead water once a day.

N. E. S., Sparta Centre, Mich.—1. You will find much information about cloaking in W. W. Greener's book on "Choke Bore Guns," but if you want your gun choked we would advise you to send it to a regular gun maker who has the requisite tools and machinery. 2. We know of no place in this country where you can get the callipers.

C. J. G., Lebanon Springs, N. Y.—1. The relative strength of the different barrels depends upon who makes them and the care taken in their manufacture. 2. The rifle is safe and serviceable. 3. Conical base shells have no advantage over the ordinary shells. They were originally made because it was thought that they would prove like the conical-bore muzzle-loaders. 4. The thread-wound cartridges have proved to be all that is claimed for them, when they fit the bore of the gun exactly.

M. W. Q., Titusville, Pa.—My small setter dog, eight years old, is not right this season. Nose warm and dry. No appetite at times. Weakness of the hind parts, so that he cannot jump logs, etc., in the woods. Tires out very easily. His eyes are bright and his coat fair. He howls much at night, especially after he has been worked. He shivers constantly. He seems restless. His food is scraps from the table. If it is not "old age" please advise me what to do for him. Ans. The trouble with your dog should not arise from age. Give a teaspoonful of sulphur once a day for a week and two purges of castor oil three days apart. Also administer two grains of quinine three times a day for several weeks. Write result.

G. A.—1. Have a 10 1/2 lb. choke bore gun, do you think they are as good for duck shooting as the cylinder bore? I do not find that I kill as many in lead shooting. 2. What would you say was the proper load for such a gun? I use 4 drs. powder, 1 1/2 oz. shot No. 6. 3. Will choke bore shoot large shot as well as they shoot small? Ans. 1. Practically settled at the present day in favor of choke bores. Your gun may be choked excessively so that its shooting is too close. 2. Your loading will do. We should use large shot, No. 4 at least. 3. Choke bores will shoot inchshot if the shot are properly chambered. To do this put in a wad 1/2 in. from muzzle and ascertain proper number to be put in layer. See game columns.

W., Cosmopolis, Tex.—1. I will find time shortly to write something of our game and its habits, and methods of hunting it. We have noticed lately an advertisement in the N. Y. Sun, of a repeating rifle, and offering very liberal terms to parties who wish to send for six of the rifles. We have some of us thought of sending, but as it is an arm with which we are not familiar, would like to know something of it from a disinterested party. Will you please tell us? 1. If the rifle in your judgment is equal to the Burgess. 2. If the rifle is a responsible one? Ans. 1. We should not recommend the arm. It is inferior to either of the others. 2. The firm have been arrested on the charge of obtaining money through the mail by false pretenses.

J. R., Junior.—1. Can one get a double barrel muzzle loading gun for \$12 or \$15? 2. What is the advantage of bar locks over bar actions? 3. For how little money can a double barrel breech loading gun be bought? 4. Is the gun all that is claimed? 5. For how little money can a good setter puppy be bought? 6. How cheap can a pointer puppy be bought? 7. Do Railroad Companies charge sportsmen anything additional for dog that he takes on shooting trips? Ans. 1. Yes. 2. More compact and considered more durable, 3, \$55 to \$40. 4. Yes. 5 and 6, Depends upon who has it to sell, the strain, age, and a dozen other conditions. From \$10 to \$15 ought to be sufficient to secure a good animal. 7. Some roads do and some do not.

E. J. I., Mound City, Iowa.—1. To brown gun barrels: Tin, of muriate of iron, one ounce; nitric ether, one ounce; sulphate of copper, four scruples; rain water, one pint. First, scrubby plug up both ends of barrels, leaving one plug in each end of sufficient length to be used as handles, then thoroughly clean with soap and water, after which cover with a thick coat of lime, slacked in water, and when that has become dry, remove it with an iron wire scratch brush. This is to remove all dirt and grease from the barrels. Then apply a coat of the fluid with a rag, and let it stand for twenty-four hours, when a slight rust will have appeared; then take barrels and immerse them in a trough containing boiling hot water, after which scratch them well with the scratch brush. Repeat this until the color suits, which will be after three or four applications. When completed let the barrels remain in line water a short time to neutralize any acid which may have penetrated. Take great care not to handle the barrels during the operation, for the least particle of grease will make bad spots. 2. A barrel 32 in. long (10 gauge) is longer than necessary; 28 inches would be equally effective, and the gun appreciably lighter. 3. See the account of Minnesota shooting in recent issues of this paper.

T. S. M., Newark, N. J.—I have just had a dispute relative to the names pike and pickerel. I maintain that they are generic names for the same fish, admitting that there are several varieties of the same in this country, but no specific fish scientifically known as pike, different from the pickerel. Ans. The names pike and pickerel are common and not scientific. The first is the old English name for the single European species, and the latter is used for younger or smaller specimens, is a diminutive, like cockerel, etc. The generic name is *Esox*, the name that the Latins called the pike, and therefore can be said to name a pike. In the vicinity of New York the "great lake pike," which is identical with that of Europe (*Esox lucius*), is miscalled "pickerel" when weighing ten or more pounds. There are some fine species of *Esox* in America, the *E. nubilior*, or masconago, and the one named above being the largest. Then comes a fish not distinguished by either market men or anglers from *E. lucius* which is also called "pickerel" and which might very properly retain the name of the good old English "pike" was restored to *basia* as it is in our Western and Southern country. This fish grows only to three or four pounds weight and is marked by black net work, or reticulations, on its sides, which in some individuals is quite distinct. This is *E. reticulatus*. The other species are insignificant. Following old custom and allowing the old English of many centuries to prevail, the large fish of the lakes, he with the oval white spots on a darker ground, should be known as a pike. This name obtains also in all parts of America, except in the region about New York and on the southern shore of the Great Lakes. In the South, as in England, a smaller one of five pounds or less is a "jack." We think the term "pickerel" should be confined to the smaller one, *E. reticulatus*.

SKINS.—Prime the skins well with pulverized alum, salt and salt-petre, and dry in open air without exposing to the sun. Before folding up for transportation thoroughly smear with arsenical soap. To tan small skins you may adopt either one of the following methods:

1. Take equal parts salt, alum and Glauber salts, and half a pint salt-petre; pulverize and mix. Handle the skins and rub the mixture in well three or four times a day—the oftener the better. If there is not sufficient moisture in the skin to dissolve the salts, put a little water into the latter. We are assured that no moths will ever attack furs the pelts of which have thus been prepared.
2. Mix the proportion of six pounds of alum and three of salt. Dissolve both in about a gallon of warm water. Use when cool.

Miscellaneous

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ERIN AND BIDDY,

IRISH SETTERS.

PRICE, 75c. EACH.

For sale by

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189 Broadway, New York.

Or will be sent on receipt of price by J. M. TRACY, 1,099 Olive St., St. Louis, Mo. Nov. 11.

For Sale or Exchange.

FOR SALE.—Breech-loading shot-gun, W. & C. Scott & Sons, 16-gauge, 28-inch barrels, 5 1/2 lbs. weight, 2 1/2 inch. length of barrel, 70 in. diameter of bore, 14 in. charge, 50 lbs. powder, 5 to 10 shot. cost \$150. Will sell for \$250, including pig-skin case and loading tools. F. B. PULLER, Cambridge, Mass. Oct. 24.

BOYCE FOR SALE.—An English "Harvard" Roadster, 52-inch, double hollow forks, suspension saddle, etc. For price and full particulars address W. DE RHAM, 24 Fifth Avenue, N.Y. Nov. 4.

FOR SALE at a bargain, a W. & C. Scott & Son Premium Quality B. L. 12-20, elegantly engraved, and all the latest improvements. Has been used one season, and as good as new. Made to order for trap shooting at a cost of \$250. Pattern of 40 yards. This gun has killed 70 to 75 wild birds at 25 and 31 yards, and is sold because owner has no use for it. Address Box 519, Palmyra, O. Nov. 11.

FOR SALE.—Stanchion or Pump Gun, for shooting on Potomac River and Chesapeake Bay. Weight, 135 lbs.; length of barrel, 70 in.; diameter of barrel at breech, 3 1/2 in.; diameter of bore, 1 1/2 in.; charge, 50 lbs. powder, 5 to 10 shot. cost \$150. Will sell for \$250, including pig-skin case and loading tools. F. B. PULLER, Cambridge, Mass. Oct. 24.

Place skins, not too lightly packed, in a barrel or keg, and pour in mixture. Skins without injury to hair may be kept any length of time in this way, and all in good order at any time to stuff.

3. Take two parts of salt-petre and one of alum, pulverize them well together; spread the skin carefully, fur side down, before it has dried; apply the mixture evenly, being careful to touch every part in sufficient quantity to thoroughly wet the surface after it dissolves; double the flesh side an roll it up closely; put it in a c of place, out of the way of the frost, and let it remain three or four days or more according to thickness; then unroll, and when it gets nearly dry with a dull knife remove the fat that may adhere in spots, and a little rubbing makes it pliable and fit for use.

4. Glauber salts, two pounds; rock salt, one pound; alum, two

pounds; all to be dissolved in boiling water; leave skins in about ten days, take them out occasionally for a little while during that time; cut the edge of the skin to see if the tanning has gone through; then take them in the hand and beat them over a round stick or block until the are soft. They are to be beaten with the hair side in.

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The only pure Collie in America that has won in Field Trials and on the Bench. Puppies from the noted Beach Show Winner Linnie by Rex, 1st St. N. Y. 1880; also from Lass O'Gowrie, 1st St. Louis, 1880, by Tweed II. Address SCOTLAND KENNEL, T. C. PHILLIPS, Manager, New Bedford, Frederick Co., Md. Nov. 11.

Mount Pleasant Kennel.

For Sale—a full-blooded Gordon Setter dog pup, very handsome; perfect black and tan. Sure to be the great prize winner; dam, the beautiful black Maid. Full pedigree on both sides. A rare chance for a good dog. CHAS. T. BROWN, P. O. Box 103, New Bedford, Mass. Nov. 11.

FANNIE, a Red Irish Setter, broken on quail, black nose and eyes, good head, well feathered, beautiful all over. She is very fast, good nose, and very staunch, does not know what flush is, and is a beautiful worker in the field, quarters her ground splendidly. Whelped March, 1879; was served by Big Bee Oct. 11. Can be hunted this Christmas. Price \$50.

BANSHEE, imported Red Irish Setter, imported March, 1875, from the Kennels of J. S. Kildare, Southwick, England, a large, strong bitch, grained in every respect. Used to be qualified, and has done beautifully, fast at hunting, good nose, not in her; hunted on quail and grouse. Was R. C. at the Crystal Palace when out of England, and won, among the most noted dogs in the country the only time shown. In whelp to Mark Oct. 26, a depre-hagony-red Irish setter. Price \$25.

GORDON Setter bitch, a beauty, whelped Jan. 1879, color black and tan, hunted on quail, and is fast, staunch and good nose. Will make a setter. A brother sold for \$125, and sister for \$100. Price \$50.

LULL, Lemon and White. Llewellyn's Setter Bitch, two years old; sire the great Carlotta, who was bred and imported from the Kennels of R. L. Fitzgerald, Llewellyn, England, and has a pedigree of 30 years; dam, Flirt. Flirt is by Dash, who won first prize at Watertown, 1874, and first at Centennial, 1876. Has been hunted. Lull is in whelp to the Llewellyn setter Zanzibar, who is by the famous Gladstone No. 15, dam Mersey 411. American Kennel Stud Book, Vol. 1, American Stud Book. Will guarantee pups. She is very heavy now, and will pup in a few weeks. She is certainly a price \$40. Address: H. B. VAN DYKE SMITH, Lancaster, Pa. Nov. 11.

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FOR SALE—CHEAP.—Dolly Varden, black, white and tan, seventeen months. Desirable, Bur Belton, eleven months. Both by Druid, out of Nilsson, sister to champion Queen Mab. Apply to AINSWORTH BURGESS, Hillsdale, Mich. Sept. 26.

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NURSERY STAKES. Open to all Setters and Pointers under 12 months of age. Limited to 15 entries. First prize, \$60; second prize, \$40; third prize, \$20. Entrance fee, \$10; forfeit, \$7.50.

BRACE STAKES. Open to all Setters and Pointers. Five braces to run or prizes to be scaled. First prize, \$250; second prize, \$125; third prize, \$50. Entrance fee, \$25; forfeit, \$15.

CLUB STAKES. Open to members of the Club only; dogs to be owned and hunted by the members making the entry. Prize, a hundred dollar piece of plate, to be selected by the winner. Entrance, 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace Stakes, and entries close on Nov. 18th.

Entries will be received for the open stakes up to mid day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.
P. O. BOX 274, NEW YORK CITY.

Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

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I HAVE received, by steamship Brantford City, the two English greyhounds, Baron Walkden and Sharper. Baron Walkden is fawn and white; 2 1/2 years old, and won the Shannon Cup, 1879, and has won several other cups, and never has been beaten. He is by Fartree out of Lady. Raleigh's Sharper is blue and white, 16 months old, by Magnolia out of Stolen Moments. They are a fine pair of dogs, and warranted true and in form. For price, &c., Address BEACON KENNEL, 23 Myrtle St., Boston, Mass. Nov. 11.

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The Kennel.

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10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00

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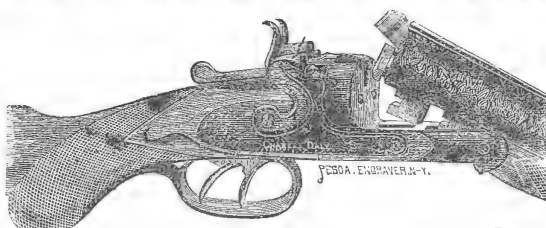
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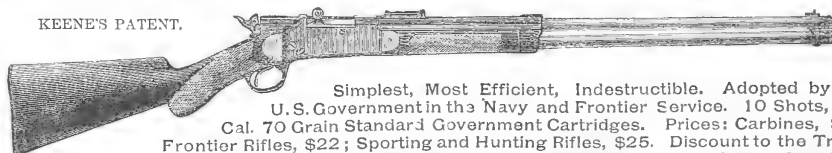
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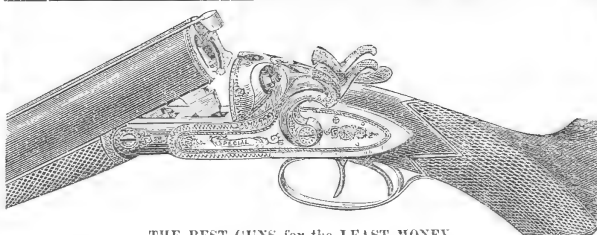
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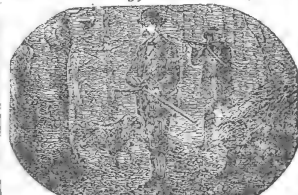
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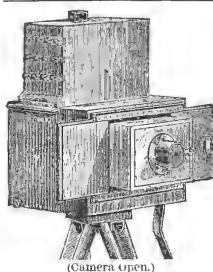
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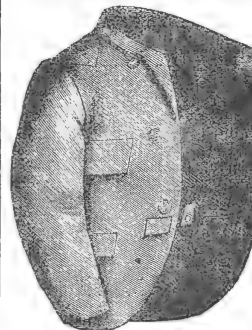
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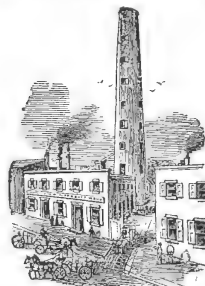
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NEW YORK, THURSDAY, NOVEMBER 13, 1880.

Vol. 15—No. 16.
(Nos. 39 and 40 Park Row, New York.)

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FOREST AND STREAM.

NEW YORK, THURSDAY, NOVEMBER 18, 1880.

—This is an excellent time to call the attention of your friends to the merits of the FOREST AND STREAM. We shall be happy to supply specimen copies of the paper to any addresses which may be sent us for that purpose.

NEXT week the FOREST AND STREAM will go to press a day earlier than usual. Correspondents will please bear this in mind.

THE LONDON FIELD'S list shows that there are in the British Islands to-day between three and four hundred packs of hunting hounds, and the indications are that the chase is assuming each year greater proportions. Some of the English packs have been in existence no one knows just how long, and it is claimed by one hunt that their hounds are lineal descendants of the dogs introduced from Normandy by William the Conqueror.

STILL REVERBERATING.—Perhaps no other article ever published in an American sporting paper—certainly no one ever before printed in the FOREST AND STREAM—had such a widespread influence as did the discussion, in our issue of Sept. 23, of the "Ditmar Sporting Powder." And we very much doubt if any other article published in any sporting paper was ever received with such a cordial and decided indorsement from its readers. We stopped publishing the letters of our friends on this subject some time ago, but hardly a mail comes to us that does not bring words of approval and appreciation. The echoes are still reverberating. To the writers, one and all, we beg leave to acknowledge our satisfaction at knowing that the FOREST AND STREAM has won their increased respect, and to express the hope that our future may be attended with equal satisfaction.

MANSLAUGHTER ON THE RANGE.

OUR readers will notice in the rifle columns an account from a Prince Edward's Island correspondent of another of those so-called accidents on the range, which are becoming altogether too frequent. This affair does not differ materially from the usual run of such killings. It may be taken indeed as a typical one and a study of it will show that these mis-called accidents should be treated and punished as cases of manslaughter. It is entirely possible to so construct a target with its accompanying arrangements of marking that it will be impossible for the flying bullet to hit the marker. This being the fact, any contrivance of marking butt by which a man's life is sacrificed should be regarded as a man-trap and the contrivers and controllers of the engine of death held to a strict accountability. It is no answer to say that had sufficient care been exercised here no accident would have taken place; the loop-hole for just such an accident was left open, and as it is entirely inexcusable that such a contingency should exist, so the results should meet with no cloaking over under the title of a mishap.

If a man should construct a boiler, and conclude to make up for the absence of a safety valve by enjoining extra vigilance upon the engineer, he would be held as liable for whatever damage might result from the explosion of that boiler. He is bound to provide the best appliances known for the purpose, and he resorts to any half-way measures and mean pinch-penny and slovenly devices at his own risk. He invites disaster, and when it comes he should be prepared to meet the legal penalties of his carelessness. This reasoning applies to the rifle range, where an association, a club, a military organization or it may be a private proprietor by a faulty construction of butt invites the killing of an employee. Winbledon went on for years without a single death from gun shot, though bullets by the million went whizzing over the range. Creedmoor has yet to have recorded her first contribution to the death list. Meantime with two such examples of what can be done by proper precautions, we are called upon every now and then to record the striking down of some hard working marker on some one of the miserably appointed and wretchedly contrived ranges scattered here and there over the country. A range may be small, but it is always large enough to serve as a slaughter pen, if proper safeguards are not thrown about the practice. At Creedmoor the most careless marker cannot by any possibility put himself before the target while the firing is going on. He is placed in a pit and stays there, and at most can only receive flesh wounds from the spattering of the lead after striking the target's face. In addition to being safe it is a really very expeditious way of signalling the location of hits; on the other hand the little ranges are generally found to consist of a heap of earth near the target, behind which very secure breast work the marker retires after signalling the shot. There is a certain time of exposure, and a period of occlusion of the marker so far as the firing point is concerned. Now if there is a certainty that the delivery of a shot and the exposure shall not be simultaneous, all is well, but the only way of securing their proper alternations is the waving of small flags, or merely the exhibition of them. By the doctrine of chances the time must come when the marker will catch the coming bullet in some portion of his body. This system of marking invites just such a climax; and while that possibility remains the system should find no use on the rifle ranges. When, by the application of vigorous legal definitions, the range officer who permits such an apology for a marking butt to remain is made to feel after one of these accidents that he has the blood of a fellow being on his hands, perhaps something will be done to remedy it. The incarceration of a few rifle-range magnates to answer a charge of manslaughter might have a healthy deterrent effect on the managers of other ranges and lead to an over-hauling of the arrangements on many a shooting ground where affairs are conducted in this happy-go-lucky, slipshod murderous fashion.

If the progress of modern rifle-practice in this country is to be punctuated in this fashion by lifeless markers, it is well that the thing should be known generally. But we object against any such line of murders, for they will be little else after the many warnings which have been given on this point. They all lead to one simple conclusion: That any system of marking that permits any exposure of the marker to the pathway of bullets must lead sooner or later to the

striking of one of these employees. That risk can be blotted out by the use of a properly-constructed range, and any shooting ground not so arranged ought to be closed at once, and not another shot fired upon it until the possibility of an accident has been entirely removed. In the present case a complainant jury have made haste to lay the blame on the dead man; and he, too, in the brief interval between the receiving of his wound and his death confessed that he was to blame. He probably thought so, but the real one to blame is the man or set of men who set this place up as a range, and probably boasted of it as such when in reality it was nothing but a lottery with death, with now and then a blank-drawing in the shape of a slain marker. Rifles and guns are sufficiently dangerous to make the best of precautions necessary for their proper and complete enjoyment. The records of the large, well-appointed ranges prove that it is entirely possible to have rifle practice even on the largest scale without accompanying slaughter, and the little pest-holes of ranges that do not present these conditions should be blotted out at once.

INDIAN BURIAL CUSTOMS.

MANY influences have of late years conspired to give a decided impulse to the study of anthropology, and students of the subject have not been slow to recognize the magnitude and importance of the field open to them on this Continent. The special task of stimulating and directing researches into the customs and social life of the Indian tribes has been assumed by the Bureau of Ethnology of the Smithsonian Institution, a most wise provision, whereby the labors of individuals, which would otherwise be desultory, or at least incomplete, are combined into a systematic and intelligible whole.

At present we have as the result of the work of the Bureau a series of introductory volumes, the direct purpose of which is to serve as guides for further prosecution of each division of this special anthropological observation and research. The first printed was the "Introduction to the Study of Indian Languages," by Maj. J. W. Powell; the second, an "Introduction to the Study of Sign Language among the North American Indians," by Col. Garrick Mallory, and the third, which is now before us, is an "Introduction to the Study of Mortuary Customs among the North American Indians," by Dr. H. C. Yarrow. Other volumes to follow will treat respectively of Medical Practices, Mythology and Sociology.

None of these branches of the subject possess a deeper interest than the one to which Dr. Yarrow's volume is devoted, for aside from the attention with which we cannot fail to regard the mortuary rites of any people, these customs are, more than all others, significant also of the modes of thought of those who practice them, and of their belief respecting the questions which are of the deepest human import. The way in which these savages, who went before us on this Continent, regarded death, the notions they had respecting departed spirits, and the solution they gave of the mystery of the future—all these are told in their manner of disposing of their dead; and through these we may determine the motives and beliefs which governed their lives. In his sepulchres and tombs the American aborigine has left us the key to his life and character.

In the final work, of which the present volume is the introduction, it is proposed to collate all the trustworthy information contained in several hundred of these volumes. In addition to this material, Dr. Yarrow has, by means of circular letters, sought to gather all the results of present study among the various tribes of the West, and of exploration among the remains left by them in other parts of the country; and the pages of his Introduction give ample evidence that the author has been fortunate in securing the intelligent co-operation of those who enjoy the best opportunities for collecting data.

For the general purposes of the work at its present stage Dr. Yarrow has divided the different modes of sepulture practiced by the Indian tribes into the provisional classes of (1) inhumation in cists, pits, graves, caves and mounds; (2) cremation; (3) embalmment or mummifying; (4) aerial sepulture on scaffolds or in trees, and (5) aquatic burial beneath the waves or in canoes which are turned adrift. The inquiry also embraces all the various rites pertaining to each of these customs, the mourning observances, feasts, food, dances, songs, games, fires and other ceremonies; also the superstitions connected with or inspiring each.

guides at 11 p. m. took their blankets and went out to seek a spot to camp for the night. And little more than eight years ago there stood a bark shanty just above, the only sign of human habitation on Blue Mountain Lake. Speaking of this rush to the Northern Wilderness in '79, Colvin says "Where one came last year ten come this, a hundred the next." He is just well right. You meet them everywhere. They permeate every accessible lake and stream, and it is hard to say what they do to the game, or how accessible. You meet them in the most out of the way places, just where you expected to be alone, and always with breech-loader and fly rod which they hang to like grim death. Said an old guide to me, "If they averaged one deer to three guns there wouldn't be a deer left in the wilderness at the end of three years." Said another guide, one of the oldest and best, "What few deer are killed here had better be killed by parties who employ us; it encourages them to come again." And P. Jones, guide to the Stickney camp and one of the most intelligent, spoke his mind. "We don't mind their coming, or to catch so many trout. Just enough for use. When we hunt for market we go to Michigan on the An Sable. Killed twenty-five there last fall, and am going again when the guiding season is over. The deer in these woods are worth more to us guides alive than dead. They are worth fifty dollars a head as they run." That is about the view taken of fishing and hunting by the average guide in the north woods.

As I had come to do the lake and mountain I concluded to go through. Climbed Blue Mountain on a hot August noon and on arriving at the village found Colvin's look-out ladder, made by nailing cross strips to the trunks of two spruce trees. It was rather an old affair and looked shaky, but I went up and took in the view, which was really extensive and fine; and then I followed the trail which leads to the signal on the highest point of the mountain, climbed the signal, and tried to make out the 28 lakes I had been told I should see, but could only make out about half of them. As to mountain peaks the number was rather confusing, but satisfying. They run together and apart by each other in manner to throw an ordinary mind into a state of temporary imbecility.

I could hardly discern Marcy, and I thought I identified Mounts Haystack and Skylight. But they rise in such innumerable and unknowable billows, peaks, points and ridges, that the mind—at least my mind—can retain only a confused recollection of them. It had been hot work making the ascent. It was cold and windy on the summit of the mountain, and the immediate surroundings were cheerless and gloomy. One could see the mountains of 1873 to give an outlook for the signals of the survey, and the dead, decaying trees, lying just as they fell, were not pleasant to look upon.

There was an excellent bark shanty between the spruce ladder and the signal, and in a swampy depression near the summit, and under the edge of a boulder, I found a pool of cold spring water which rendered the bottle of water I had brought from the hotel quite superfluous. (N. B. When you climb Blue Mountain it is not necessary to carry up a bottle of water.)

I had done the mountain, and it seemed the proper thing to do the lake. I did it. I paddled in and around among the islands, landed up and launched out again, greatly to the delight of the youngsters, who were there in force with parents or chaperones or who were exceedingly taken with the little boat, and then I finally placed her on the deck of the round-stemmed little packet and paddled by steam to Ed. Bennett's landing on the Rapquette. And then it came down to the double blade again. After a night's rest and an excellent breakfast I started out to cross the lake, and rather got down on my muscle, for the wind was ahead and rising. By the time I got into smooth water at the mouth of Brown's Tract Inlet it was getting rough, and I was glad to be in the tortuous but safe inlet once more. A tedious paddle of four miles, a weary carry of one and a half, brought me to the Eighth Lake.

Wind ahead and hard traveling. Another tiresome carry of a mile and over and I was on the Seventh, with the wind strong and the second largest lake of the chain to cross. I was a long time making it, and was almost too tired to make the next carry from Fifth to Sixth, but I finally shouldered the canoe and made the distance slowly and wearily to the Fifth, which at least ended carrying for that day. It was well that the wind went down with the sun or I could not have made the rough and stormy Fourth, which often drives the best guide boats to land. As it was the canoe pitched and danced about quite lively, and it was nearly dark when I landed at Ed. Arnold's, on the south shore of the Fourth.

The Fourth, by the way, is the largest lake of the chain, and is famed for its lake trout. Arnold's is a central point for catching them, and he is an experienced guide. His terms are low, \$4 per day, or even less by the week. He has buoys at the best points near the house, at which you can fish as much as you please, and you are supposed to bring your fish to the house. A night's rest at Arnold's, a pleasant canoe ride down the Fourth, through the placid Third, by the Eagle's Nest into the Second, by the Stickney camp into the First, with its dead timber and long narrow outlet, and at 9 a. m. I landed in at the Forge House, having well pleased with my Blue Mountain trip, but with no idea of repeating it this season. I can do better.

NESMICK.

SUMMER SPORT IN ALASKA.

STRETA, Aug. 2, 1880.

TWO-THIRDS of another summer had passed away, and but for our alliances we would hardly realize it, for our mountain tops are still snow-clad and our winter clothing in demand. Since early spring when the ducks and beach birds appeared in countless numbers, preparatory to their flight northward our guns have lain idle. Now and then an Indian, mulberryed by any scruples, has slain a mallard or buff-head which are, I believe, the only true ducks which nest in this vicinity, and an occasional grouse or ptarmigan, whose bare breasts showed that its duty to posterity was being performed when killed, have been all the feathered game obtainable for the table. But we have shot quite a number of odd-looking fowl which Cooze's Key identifies as pullin aukes, guillemots, grebes and divers, and of each genus several. I have seen in my notes the name and dates of killing of Northern diver, red-throated diver, Western grebe, horned pullin, tufted pullin, horned-bill and knob-billed Alaskan aukes, marbled, scoty, and pigeon guillemots and divers other shags, coots etc., etc. Venison has been plentiful and good, and improving weekly as family duties and cares have grown lighter and the grass more plentiful.

Fish of several varieties have been plentiful, and we have had better sport trout fishing than we did last summer, when by this time we were sated with the work of hauling out bushels of fish that were to be captured by the veriest tyro,

with the mildest gear. This year they have been far less plentiful, and a good basketful is not a certainty.

The cause is one worth noting; it is simply the immense body of snow still resting on the mountains, which has kept the creeks high with snow water, and the temperature as a consequence low. The salmon trout (*Salmo spectabilis*) still lie outside in the warm, salt water, running in for a brief space on each flood, and flinging no salmon roe (for as yet the salmon have not taken to the streams) soon returning to the warmer salt water.

Thus the element of chance has entered into the problem, and the fishing has assumed more the character of sport; the more so as although we are pretty sure that each flood tide will bring the trout into the streams, we have no way of finding out, except by actual trial, just how far they will run up, or where we will find them, or when they will run in.

The salmon have been cruising around as usual, but except the first run early in June none have come into the streams. They appear for a few days and the channels are lively with them, and the pursuing porpoises then they disappear, and for several days none are visible.

There have been five varieties which I know of up to the present date, and just now a run is in, which is composed of two kinds—viz.: the lump-backed—(*Gorbusha* (Russian name), a fish of very little value except for smoking, and the *Kibee*, a very fair table fish and valuable for canning. Among some three hundred brought in by our boat this afternoon the two varieties mentioned were about equally distributed, and there was one only of a variety, the Russian name of which is *Keschik*. This fish is considered to be the best of all, and is the last kind which run, it not being due before the middle of August. It differs from the *Kibee* and other goodsalmon in this, that the tail is nearly square, the scales a little larger and the roof of the mouth is black. I bought this fish for two bits, buying at the same time for use as halibut bait three of the *gorbushas* for the same sum.

The loss of the creeks has been our gain, for having no other occupation for their time, the salmon have amused themselves at our expense, in taking our spoons while trolling for a fish, which has been very plentiful, and which until Dr. Beam came among us we called black sea bass, but which now we are better taught denominate the *Chirus*. Of these there are two species—viz.: the *Conchobatus* and the *Decegrammus*. We get them weighing from one up to eight and ten pounds, and as the efforts of a ten-pounder to get clear are about equal to those of a half-pounder lead black bass or trout, we have taken in particular pains either in providing very strong gear, or in handling.

Which, however, one day an eighteen pound salmon took hold of a bass spoon, fortunately attached to a good line and trolling rod, handled by a young gentleman from San Francisco, Mr. Ben Woodworth, now spending a month with us, who under such circumstances thoroughly understands his duties, and therefore landed his fish, and when the next day, an eight pounder took the same liberty with a beautiful little spoon attached to a line made fast to a beveling cleat, and was hauled in hand over hand by a lady and her husband, both perfect tyros in the gentleman, and who from the description of eye witnesses, exhausted nearly every source which would ordinarily prove sufficient to get rid of even a bunch of kelp, but in spite of which the fish was saved, and hauled into the boat without the aid of gaff or exhaustion, we concluded it was worth while to fit out for salmon.

I of course had not wasted a minute in getting to work, and, fortunately for my reputation as a fisherman, my fifteen-pounder was safely in the boat nearly an hour ahead of the rest of my party.

Then everybody went at it. I had five spoons, which had done good service at Alexandria's Bay, Piseco, and Lake Ontario.

I landed three, and with the result usual under such circumstances—all of the three were appropriated by salmon, which in contests of strength had got the best of the fishermen. I then lost another myself, and on my only one left no salmon will strike. No lines will express my feelings more vividly than these from the "Ancient Mariner."

"Water woe everywhere,

"And a lay by a creek,"

which with slight verbal changes will fit. I have tried small trout string on large Limerick bass hooks, after a fashion I learned at the Gallops, by which a curve, which secures spinning, can be obtained. These work well enough in getting strikes, but the double guts twist up so hard that at each strike the snells snap and I lose my fish and hook also.

I spoke of purchasing salmon to use as bait for halibut. This may sound odd to you East, somewhat equivalent perhaps to using cod for the procurement of copper; but in Alaska it is different. Fresh mackerel or mackerels are not better bait for fish of all kinds than fresh salmon, and there is nothing cheaper than salmon here.

Within a radius of five miles from the ship there are quite a number of sand banks on which halibut, are plentiful, and other rocky patches, where immense rock cod (I caught one weighing twenty-three pounds), Norway haddock and other large fish abound, and the only drawback to good fishing being the usual one, a superabundance of dog-fish, who don't seem to be at all particular, haunting the resorts of all sorts of fish.

The halibut of Alaska are bound to help develop the country. They are plentiful and of excellent quality, and we get them in from five to forty fathoms water.

The schooner General Miller, Capt. Morrissey, 100 tons capacity, left San Francisco, June 13, to search for halibut. Tired thoroughly Queen Charlotte Sound, Dixon Entrance, Chatham Straits and various other places en route here unsuccessfully, July 15, in sight from this ship, she began to take in fish in pay quantities, and on the 21st when I heard her she had with three of her six dories (a new boat in this locality) taken about seven tons. With her other dories, three in number, the time was occupied in seizing salmon for bait.

As a ten-pound salmon can be bought for five cents, and caught perhaps for less than a cent, and as one such fish will cut up into about thirty bait, which will probably catch not less than 500 pounds of halibut, it is evident that the cost of bait is a smaller item in proportion to the returns than is the cost of bait on our Eastern banks.

The schooner has just come in from a ten-days' cruise among the outside banks, during which her catch has averaged over 7,000 lbs. per day, and she is now over a third loaded with every prospect of filling up during August, which is always a calm, pleasant month here.

The salt used is procured in San Francisco, at \$16 per ton, and is manufactured at Redwood City from sea water. We all got the halibut fever, and have had lots of fun, hard work and excitement. My biggest so far weighed 150 lbs., and

was 5 ft. 8 in. long. I had a log of wood slung with spans attached to the end of fifty fathoms cod line, and it was very exhilarating to see that log go diving under at about ten knots an hour.

I learn that within a short distance the halibut are far more plentiful than here. So there can be no question but that in time the business will be well followed up, that is if this present venture makes a good market, which, as most all South Americans like salt fish, I fancy it will.

Mining enterprises have received little attention this year. The snow has postponed everything. We live in hopes.

PHUGO.

NOVEMBER.

NOVEMBER'S frosty days are here, With faded grass and foliage here; The tufted woodlark tops are brown, The oak tree wears a yellow crown.

The landscape far and near Is painted with a russet hue; The distant hills, erewhile so blue, Bedded by autumn's lavish brush, Glow with an evanescent blush Enchanting to the view.

The brooks that thro' the meadows sweep, Or thro' the tangled thickets creep, No longer flash and gleam; For dead leaves fill the woodland walks; The wild flowers droop their wither'd stalks And choke and stain the stream.

The mill-pond where the wood-ducks swim, Swoll'n by fall rains to the brim, Pour o'er the mill-dam's mossy stone A tide that makes the old wheel groan, Revolving on its beam.

The angler no more plies his craft In slushy pool or anchored raft By brook or pond or bay;

But now it is the joyous time, When crisp grass is white with rime;— It is the sportsman's day!

The brown quail fill the stubble field; In the bare woods, but half conceal'd, The partridge is his prey.

And where the salty marshes spread The bay-snipe crouch overhead; And where the breezy bays expand, In shallow cove, by shelly strand,

The honking, quacking wild fowl poise, And yield the gunner endless joys.

Shelter Island, Nov. 7.

ISAAC McLELLAN.

TRIGGER AND REEL ON MARTHA'S VINEYARD.

WHILE such a vast number of the countless resorts for the sportsman with their manifold allurements have been so closely, and I doubt not faithfully, described in the columns of the FOREST AND STREAM, I have never seen during the time I have been a reader of that journal even an allusion, if I may be allowed to except a single hotel advertisement, to the by far more than ordinary facilities for healthful and sportive recreation offered to the sportsmen of the rod and gun by the interior and southern and western shores of the "far famed Isle" of Martha's Vineyard, which though situated within easy access of the fraternity from nearly every city of the Eastern and Middle States is as yet well nigh a terra incognita to the sportsman from such districts.

The island of Martha's Vineyard, situated as it is in a position peculiarly adapted for the purpose, forms a sort of *medius res*, or middle ground, for large flocks of Canada honkers and immense numbers of wildgeon, teal, bluebills, sheldrakes and whistlers, with an occasional mallard more hardy and nomadic than its wont. In times past mallard were found here in abundance, but with the genesis of "bottom action shooting irons," as those not fortunate enough to be the owner of a breech loader sarcastically term that useful innovation upon the "Queen's Arms," the last named has almost entirely disappeared, and during the spring and autumn flights of these birds it is in the sheltered bays and lagoons of this island, before the advent of the summer visitor, and after the exodus of the camp meeting pilgrims, for which latter this is a veritable Mecca, may rest in comparative security from the labors of their wearisome march from Northern or Southern fields, and with but little fear of that obnoxious pest, the pot-hunter, plume themselves for the homeward run. This is in no wise a paradise for the before-named pot-hunter. He would either starve here, or what is more probable, would spend a considerable portion of his time within the walls of the county jail; for although there is no regularly organized sporting association here, which is a matter to be greatly regretted, yet the "sport" of the many old and young who are religiously observed by them, and which if prevailing in other districts, would almost entirely obviate all necessity for legislative interference to protect the game from annihilation. They are also scrupulously exacting in obedience to the game laws; they neither infringe upon them themselves nor allow others to do so, and we betide the unfortunate whose avarice tempts him to pull trigger upon an unsuspecting feather out of season.

But for a sportsman, whose nature would revolt at the idea of practicing the nefarious slaughter so easily accomplished with the battery and its swivels, who is willing to give the birds a fair chance of retaining their liberty, the sport is abundant and well worth a trial; and any son of Nimrod possessed of a good gun, a sharp eye and moderately controllable temper, can reap here as large a crop of pleasure and rudeness as anywhere upon the Atlantic coast. The large ponds and coves which abound here and in close conjunction are favorite resorts for the different species of ducks of which I have spoken, as well as of large numbers of the dusky—or what is more commonly known as the black duck—which, unlike the others, make this a permanent abiding place. But he must be gifted with the craft and patience so necessary to entitle him to the dignity of being a sportsman to bring this wary bird to bag; for he is "to the manner born," and in diplomatic parlance is "up to snuff." In the proper seasons the *Anser canadensis*, the bare mention of whose name must make the pulse of all true sportsmen thrill with exciting desire, is to be found here in quite large numbers and

fairly easy to secure. Although this locality, isolated as it is, includes a territory of but small compass, and is stationed like an advance post upon the very border of the restless Atlantic, there are many other varieties besides migrating sea-fowl.

No other portion of Massachusetts, and I know not if in any of the Eastern States besides, can be found the gaudy and footsore prairie chicken, which abound here in quite large numbers and retain the primitive purity of its Western fellow. Many have supposed this to be the ordinary prairie, so common throughout the sections of this and other New England States; but examination has proven beyond question that this "heath hen," as it is called here, is the veritable pinnated grouse of the prairies, but in what manner they came to locate here in preference to any other portion of the Old Colony is not known. However, they are quite abundant and extremely tame, and being well protected during the greater part of the year by a special law, they are allowed to breed in security, and their ranks are but slightly thinned during the "off months."

Here also are quite large numbers of quail, which during the season form one of the most pleasing subjects for the sportsman's cunning. Although the winter here, as short, yet they are sometimes very severe, which, coupled with scarcity of food and the destructive foraging of hunting felines, of which there are hordes here, tend to reduce their numbers very materially.

In their season, plover, willet, rail, snipe and most of the shore birds generally found along our sea-board, are to be had in abundance, and the immense flocks of coots, which lie just off these shores, afford very exciting sport to those who are willing to risk a wet jacket or a cold bath in the small dories used by those who make it a business to go after these fowl. The gunner finds no difficulty in approaching within shot of them, and if after several shots have been fired they show signs of uneasiness, or an inclination to seek less disturbed waters, it is only necessary to wave a red handkerchief, or any other piece of red cloth, in the air, attached either to a tiller or gun stick to bring them back at once to gratify their eager curiosity and learn what is in the wind. A word of notice will stir a strange chapter of amazement and mishaps at first. If the sea is somewhat rough and the small boat a little unsteady, the young man who can show a score at his sporting club is well calculated to excite the envy of even veteran marksmen, if he has even been out after coots before in an open dory, will be very apt, immediately after pulling the trigger, of what has always before proven his trusty choke bore perhaps, and with his imagination fired with the certainty of bringing off the first shot, or the first dory foundered at the bottom of the incoming wave not two feet from the boat-side, into watery ribbons after receiving the entire charge; but practice and perseverance in this as in other cases bring about better results, so that in a short time the tyro learns to his profit that it is better to fire when mounting on the crest than to shoot through a following sea, while the small boat in which he is pitching in the trough. It is but little use to endeavor to pick up crippled coots; either they will shoot dead at the first fire, or the gunner must wait for another chance. A wounded or wing-broken coot no sooner strikes the water than under he goes and is lost to all sight, and it takes a very keen eye to discern the tip end of his bill above the surface, an eighth of a mile nearly away, when he rises for breath, and a very quick hand to send the shot into the back of his head before he dives again, to add that duck to the day's strain.

But I have digressed from my purpose, and instead of describing the shore game of this island have returned to the sea fowl found on these shores. I must not forget to mention the raccoon as one of the game subjects of Martha's Vineyard. Upon being informed of the presence of these animals here I must own that it was not until after I had received conclusive evidence of that fact before my incredulity was overcome. Nevertheless, there are "coons" here and in plenty, and so annoying and destructive are they that "coons" and black-birds are but some of the objects of the sportsman's rifle and the fety of his cornfield. There are but little hunted, because of the scarcity of dogs suitable for that purpose; but with a good "coon" dog, and I must not forget to say with sufficient previous experience to enter into the hunt with open eyes, but few localities can afford better facilities for this historic pastime of "coon" hunting than this very island. And for those who despise not little things, there is as fine rabbit shooting here in winter as any man of moderation can desire. Thus far I have confined my very meagre description of the sporting character of Martha's Vineyard to the fur and feather of the island, but in my next paper disciples of the rod and line, which can be used to such varied advantage as is offered by few resorts, shall receive their need of information.

E. A. D.

TENNESSEE HUNTING GROUNDS.

IN a former article I briefly mentioned some of the geographical features of the Cumberland table land, which is situated mostly in the north middle part of Tennessee. This table land has an elevation of 1,000 feet above the valley of East Tennessee, and its area is about 5,000 square miles. The rim is bounded by a continuous line of rocky bluffs, which break off abruptly, forming a barrier which in most places is impassable for man or beast. The western edge is more rugged, and notched by deep, narrow valleys and gorges at irregular distances, and separated by huge towering cliffs that rise in massive grandeur far above the average level of the table land. This broad and extensive plateau extends from northeast to southwest about 100 miles and has an average width of fifty miles. The C. S. R. R. crosses the northeastern part, then following down the Big Emory River into the Tennessee Valley. The prevailing timber is oak, of which there are several varieties. The woods are open except occasional thickets, and during the summer the whole country is covered with a thin growth of wild grass.

Here, if history is correct, was once a noted buffalo range. In Heywood's "Early History of Tennessee" he says that when the first settlers came to the bluff, in 1779, nothing was presented to the eye but one large plain of woods and cane frequented by buffaloes, elk, deer, wolves, foxes, panthers and other animals suited to the climate. The lands adjacent to the French Lick was a large open space, frequented and trodden by buffaloes, whose large paths led to and from all parts of the country and there concentrated. He says that here were evidences as everywhere else of having been inhabited many centuries before by a numerous population. The only springs are the appearance of walls inclosing ancient habitations, the foundations of which were visible wherever the earth was cleared and cultivated, and to these walls entrenchments were sometimes added.

Mr. J. G. M. Ramsey, in his "Pioneer History of Tennessee," says: "The woods abounded in game, and the hunters procured a full supply of meat for the inhabitants by killing bears, buffaloes and deer, and that the party, twenty men went on the Cane Run as high as Flinn's Creek, and returned in canoes with their meat in the winter; in their hunting excursion they killed 105 bears, 75 buffaloes and more than 80 deer, and that this source of supplies furnished most of the families at the Bluff with meat during the winter."

Cane Run is made up of numerous small streams, which drain a portion of the table land, and after running zig-zag courses between outlying ridges and over precipices and through deep gorges, finally break through the western rim into the Central Basin, thence into Cumberland River. This great Central Basin, which is drained by the Cumberland and its tributaries, seems to have been a theatre of stirring historical events. Here the Indians and white men contended for the mastery many years, until the pale-faces conquered, as usual, after much bloodshed, terror and distress. The whole region of country, embracing the tributaries of Cane Run, remains a wilderness still. The surface is rough and broken. Deer and wild turkeys are found here in moderate numbers, with a few bears, and occasionally some gray wolves are found; but the oldest mountaineer cannot remember back to the time when elk or buffaloes roamed through these forests.

The Sequatchie River drains a portion of the southeastern part of these table lands. This stream is about forty miles in length and runs a southerly course through a rich fertile valley, which has been sparsely settled more than fifty years, yet the hunters remain here still and are frequently caught during the winter months. Otters are found in most of the smaller streams; also raccoons and mink; but the latter are not plenty, and the fur is rather of a poor quality, and I have seen no real prime furs here. Wild turkeys and quail are found more or less through the length and breadth of the State.

Piney Bluffs, Tenn.

I have so frequently noticed inquiries made in the FOREST AND STREAM as to where good hunting and fishing could be had, I fancy that an answer from me would be opportune. Tennessee is the place; it is easy of access, thickly populated by a most hospitable people, has a temperate climate, and as many varieties of game and fish and more of them than any other State in the Union. In the mountains black bear are numerous, in the middle and western counties deer and turkeys are abundant, millions of quail, while Redfoot Lake, ducks, geese and swan can be slaughtered by the wagon load. The greatest trouble the huntsman would encounter would be the *embarras de choix*. The following letter to Col. Geo. P. Akers from the famous old sportsman, Matt McKinney, gives a fair evidence of the above assertion.

A turkey hunt to be supplemented with a fine old "buck" is not met with frequently, especially in a country where every thicket has its covey of quail and the trees made musical by the chattering of squirrels. When the matter is decided by the chattering of squirrels, the hunter is in the midst of the lights, the wily Remy can be chased or the sly "ptarmigan" may be hunted. Satiated with these sports, at each few miles streams filled with the finest fish, such as bass, perch, suckers and catfish, are met with, and from which the expert disciple of Sir Isaac can derive the most delightful pleasure. The beauty of this section is the climate and the comforts which the sportsman can enjoy. The birds are abundant within a few miles of this city, and a good fox chase can be had within the same distance. For the larger game more remote places must be visited, but in no case a very great way from telegraphic communication. There is scarcely a farmer who will not provide comfortable back, wagons and horses, and in most instances be glad to join in the chase or fishing near his place. Or if the party prefer camping out, as I have already said in the FOREST AND STREAM, they can do so comfortably in the open country. Parties coming this way had better bring their own dogs and equipments, although we can boast of as finely bred and well trained dogs as are in the country, and several of our hardware merchants keep on hand good stocks of fishing tackle; and we have also a gunsmith, who can furnish ammunition and all the paraphernalia which may be required. I mention no names, but simply the facts, so that unnecessary preparations may be avoided by the gentlemen who will be induced to visit the "mountain State."

Nashville, Tenn.

The letter referred to is as follows: "I have been idle all this fall and I have put in my time hunting and fishing pretty well. Last week, having grown a little weary of the monotony of this side of the river, I proposed to Major Bingham that we would cross the Cumberland at Black and visit the country on the north side. We left Nashville at 10 o'clock and went out in the bottom and left a wagon load of turkeys. He out in the bottom and left a wagon load of turkeys. He agreed to it forthwith. So early next morning I heard Bingham's horn, and a yelp from Tom and Jim, his two famous old deerhounds, told the story at once that his cartridges were not all charged with turkey shot. He had sent up to the Springs for his son By; and off we went."

Well, we crossed the river at eight o'clock and landed at old Sam Waters', about three miles above the Barbours place, about nine. Old Sam was adjusting the sights of his rifle, I never saw as much turkey sign in my life. By ten we had fed our horses and were out for a hunt. I did manage to kill one stray turkey, but saw very soon from the motions of Bingham and old Sam that devilish little turkey hunting would do them. In about half an hour a yell from the two hounds and a scream from old Sam confirmed me.

A large old buck was up, and away they went, Bingham and old Sam with them. The wood-choppers had fortunately scattered a flock of turkeys, and the sight of the old fellow was the signal to the old fellow. We succeeded in bagging two more before the Buck By and I succeeded in bagging two more before the young gobblers. In about three hours they returned, having stopped the dogs at the celebrated old Post Oak stand, between Skinnerhorn's and the old Colley Place. But nothing daunted, in they went again through the same drive, and with about the same success only. This time he made for the Cumberland instead of the Tennessee, and old Sam got a shot about a quarter before he took water at the mouth of Crooked Creek. By ten we were in the woods, with those two old hunters in the woods, that was a dull prospect for turkey hunting. But we talked the matter over that night, and they both agreed to do better next morning. By sunrise the horses were saddled, and a blast from Bingham's horn was the signal to be off. We hadn't gone a quarter before, under the pretence of a turkey hunt, I saw the old hunters meant the same programme as the day before. I was placed By at the old well, and I took a stand up position at the deep cut on the old railroad track. In about twenty minutes,

sure enough the dogs and old Sam and the major were all booming. They were gone up the river out of hearing for about an hour. But we held our places, and here they came. About the old Wingo House I heard the dogs separate. Tom put one through about 300 yards below By, and I could hear Jim coming like a locomotive directly for my stand. I could see in a twinkling that I "held the ago" on him; and sure enough here he came, a four point buck. Two shots in quick succession as he crossed the railroad track, my Barlow in his throat, Jim hold of his quarters, and the jig was up. We landed with him and three turkeys in Wingo's house about the afternoon. Wharton's hunt comes up almost immediately after the election. I am going to slip over again next week. I don't think I can go in their regular hunt, but will be slipping round on the outskirts.

Natural History.

OUR WATERFOWL.

II.

PRE-EMINENT among our waterfowl stand the Swans.

Their very name has become synonymous with grace and purity of coloring, and a wild swan is certainly one of the most beautiful, as it is one of the most majestic, of birds. The sportsman, however, usually regards his game from a practical rather than an æsthetic point of view; but viewed in this light these birds are no less interesting. We know of no game that will cause the blood of the man who uses the shot-gun to course through his veins with more rapid flow; and the prospect of getting a shot at a swan is worth almost any amount of crawling through mud and wet. They are very wary birds, and besides, even after one has come within gunshot of them he is by no means sure of his game. They are so large and so well protected by feathers that unless they are struck in the head, neck, or wings they are very likely to escape the disappointed gunner. If wounded only, their tenacity of life is great, and their strength is such that they will fly or swim for a long time after having received a fatal wound. Although swans appear to little advantage on dry land they move through the air or over the water with great swiftness. It would scarcely seem possible that such great birds could fly with the enormous speed which they attain. It is, however, a matter of some difficulty for them to rise from the water, and they are obliged to fly and run along its surface for some distance before they can fairly take to wing. On some of the small alkaline lakes of Nebraska, where *Cygnus americanus* certainly breeds, and perhaps also *C. buccinator*, we have seen them fly several times around the lake, the repeated striking of their wings against the water sounding like a rapid succession of pistol shots. Once under way, however, their powerful wings bear them along with astonishing speed, and it is necessary for the gunner to aim well ahead of his birds if he is to bring them to lag. Their progress through the water is so swift that they can without difficulty outstrip a boat propelled only by a single oarsman. Audubon testifies to this, and mentions that he frequently pursued the Trumpeter swan in canoes without being able to approach near enough to it either to shoot or to force it to take to wing. He also quotes from a letter received from Dr. Sharpless, the following statement with regard to the American Swan: "A gentleman who resides on the Chesapeake, near Brush River, informed me that a few years since he had wounded a swan, and afterward cured and tamed it. To prevent it from flying away he clipped its wing, but it occasionally escaped to the water, where he had often followed it for several miles, with two rowers, before he could catch it."

The range of the Trumpeter Swan appears to be restricted to the western portion of North America, and ornithologists generally speak of it as not being found east of the Mississippi River, though it is included in some lists of birds of the more eastern States, on evidence, however, which is not altogether satisfactory. The supposed *Cygnus porphyrio*, which is quoted by Dr. Coues as belonging to this species, was taken in Canada.

Cygnus americanus is found throughout the United States, although on the Atlantic coast it does not appear to be common either in New England or south of South Carolina. The centre of its abundance on this coast would seem to be the Chesapeake Bay and the Virginia coast generally. In the west these birds occur in small numbers during the summer, and we have found them breeding in small alkaline lakes about fifty miles north of North Platte, Nebraska. It is only during the migrations, however, and in winter that they are found within our boundaries in any considerable numbers. They breed, however, in Alaska, according to Mr. Dall, where also the Trumpeter is found in summer.

As these articles do not pretend to have any other purpose than to teach the sportsman how he may without difficulty distinguish one species of water-fowl from another, any extended remarks on the habits of the different species would be out of place. For a like reason it is unnecessary to give the special character by which the swans are to be distinguished from their nearest allies among the *Anatidae*. No one who shoots one of these birds in this country will be in doubt as to whether or not it is a swan, and it is therefore only necessary to compare the two species.

Cygnus buccinator, Richardson. Trumpeter Swan. White bill and feet black. Tail of (usually) twenty-four feathers. Bill longer than head. The nostrils nearer the base than the point of the bill. Usually larger than *C. americanus*. *Cygnus americanus*, American or Whistling Swan.

White Bill and black back. The former often yellow spotted near its base, and shorter than the head. Nostrils not midway between base and tip. Tail of twenty feathers.

The young of both species are gray, and are sunnier than the adults. The spot on the bill of *Cygnus americanus* is not always to be found, being often absent in young birds, in which the bill is sometimes flesh colored. The size of the bill, position of the nostrils and number of tail feathers will, however, serve to distinguish the two species.

The geese of North America belong to four genera, one of which, *Dendrocygna*, is quite southern in its distribution, and is scarcely likely to come to the notice of any of our readers, except those of Texas and Southern California. One species, *D. americana*, merely crosses our southern boundary line, while *D. fulva* reaches California, and is stated by Belding to occur as far north as Stockton, Cal. The former species is reported by Dr. Merrill to be extremely abundant in the vicinity of Ft. Brown, Texas, where it is called *pato maizal*, or cornfield duck, from its habit of frequenting such localities. A correspondent of FOREST and STREAM recently gave some account of shooting this species in Texas. The birds included in this genus are duck-like, tree-inhabiting geese, and serve to connect this group with the true ducks.

Typical forms of the three remaining genera of our geese, *Anser*, *Chen*, and *Branta*, are to be found generally distributed throughout the United States during the migrations. Of these by far the most abundant and generally known is the common gray or Canada goose, and this is probably the only one which ever breeds with us, all the others proceeding to high latitudes for the purpose of nesting. The peculiar little "wavy" *Chenrosi* is more Arctic than any of our geese, and is very rare in collections, but reaches the United States in winter, and has been taken at San Francisco. The Painted Goose, *Phalacrocorax*, is an Alaskan species, and is only found on the northwest coast.

[TO BE CONTINUED.]

SNAKE BITES.

Editor Forest and Stream:

Dr. Stradling, surgeon on board the British man-of-war *Elbe*, is credited with having made a very foolish experiment by allowing himself to be bitten, on the 1st of last August, by a rattlesnake (*Crotalus horridus*). The doctor seems to have provided himself with the usual antidotes, such as ammonia, brandy, escharotics and ligatures, but feeling no immediate bad results from the bite permitted himself to be thrown off his guard and failed to make use of them. After the lapse of some four hours he was found suffering under excessive prostration, and was restored to life again through unwearied exertions, lasting over two or more days.

Such is the account I have just read in a leading American journal, purporting to be taken from an English scientific publication, in which the details of the occurrence are minutely given. It differs materially from another narrative that I have seen in several papers, to the effect that the Quixotic experimenter professed to have discovered and used an infallible remedy against snake bites; did actually resort to it successfully at Rio, and subsequently aboard ship. I refer to this circumstance simply as introductory to an event, *magna pars fui*, which interested me very much at the time, and which seems to me worthy of being generally known.

Intending to spend the summer several years ago in the mountains of Virginia I took with me, I have constantly about me as a precaution against the perilous venom of rattlesnakes, a small vial of ammonia. One day while out shooting with my son, and being a short distance from him, I heard him call several times loudly to his dog, and finally fire his gun.

Instantly I heard the yelp of the dog, a pointer, and the voice of my son urging me to come to him. Hurrying to his assistance, questioning whether he had shot the dog or had himself suffered some injury, I found on my arrival near him that the dog had pointed to a copper-head snake (*Crotaphaga contortrix*), or rather two of them, which seemed to be male and female, and had been struck by one of them on the fore leg just above the ankle joint. My son had shot the one he observed with head erect, which probably had inflicted the wound, not seeing the other which was killed a few moments later by a companion.

The poor dog seemed to be suffering great agony, and was struggling about on three legs uttering incessant cries of pain. It was the work of a moment to bring forth my harshest and thoroughly saturate the wound, the situation of which was very apparent from the presence of a drop of blood that stained the hair around it. The relief seemed to be instantaneous. Not another cry he uttered, and seemed to experience no ill effect except that the leg and corresponding shoulder swelled to twice their natural size, and remained so for a day or two. Could the remedy have been instantly applied it is quite possible even this result of the wound might not have taken place. Two or three minutes elapsed between the infliction of the bite and the employment of the remedy.

In India it is a common practice, I understand, for the army surgeons to have about them convenient for instant use supplies of *Aqua ammonia* in order to neutralize the poison of the deadly cobra. Why should not sportsmen, and hunters especially, and all other persons according to the measure of their exposure carry with them in their mountain expeditions a small glass stoppered phial filled with the same liquid as a precaution against mischief from the hardly less dangerous copper-head and rattlesnake?
E. G. W.

Cambridge, Ma. Nov. 9, 1880.

DOES THE PANTHER SCREAM?—In FOREST and STREAM for October 14 your correspondent "Ap-wa-cun-na" expresses a doubt of the screaming of the catamount or panther. While I leave it to Mr. Cornish to describe the "kind of noise" his animal made, I here leave to say that if the Northern panther is identical with the panther or jaguar so common along the banks of the Amazon and other parts of South America, its vocal powers are decided enough. Its common cry is a loud, snarling yell, increasing in shrillness and volume, and then gradually diminishing in sound. When the opposite sexes meet, they play cat in a manner that makes the surrounding forest pretty musical, as each strain is generally answered

by the whistle of the monkeys and screams of the alarmed parrots. I have no doubt that in such districts as the Adirondacks, etc., where the larger animals have hard time to hold their own against the frequent incursions of hunters and other visitors, they are more silent and hiding in their habits than they are in the jungles and forests of more unfrequented places. Such has been my experience everywhere with wild animals. I believe all the *Panthera* have the same habit of screaming as our domestic cat; I know the South American and African species have. Like the questions, Do snakes hiss? and Will the shark attack a man? I presume there will be plenty of answers in the affirmative to the question, Does the panther scream?

There is no doubt that the panther (*Felis concolor*) does scream. Its cry is merely an exaggeration of the voice of the cat. We have frequently heard caged animals of this species give utterance to sounds which were exactly similar to cries heard in the Rocky Mountains and said by old hunters to be made by panthers.

It should perhaps be remembered that the jaguar spoken of by "Peregrine" is not identical with the panther. The latter is found in South America, but is apparently an inhabitant of higher ground than the former, its range including mountains and elevated plains, while the jaguar seems to prefer jungle and river bottom.

RALLIES IN KENTUCKY.—*Bardonia, Kentucky, Nov. 10.*—Editor Forest and Stream: A good many sora rail have been killed in this vicinity this fall, a bird which, so far as I can learn, has never been found here before. In October I also shot two yellow rail (*Porzana porzana*), Cass.

The coot (*Fulca americana*), another bird which seems to be entirely new to this region, has lately been found here. I have only heard of four, and they were all captured alive, as they were apparently unable to fly. Now as they were evidently migrating and must have got here from the North in some way, and couldn't very well come by rail and steam, will you kindly explain how they accomplished the feat? I obtained two of them and have had them in confinement for over three weeks. They thrive well and are becoming quite tame, eating freely from the hand. They appear to be rather omnivorous, their *menu* yesterday consisting of grub-worms, angle-worms, crickets, tomatoes, corn bread, grass and cabbage leaves; the latter they seem to be particularly fond of.

Quail are abundant here this season. C. W. B.

It occurs to us after mature consideration that perhaps they flew.

It must be mentioned that most of the members of the rail family live in such localities that the sportsman might not in a long time catch sight of one. Most of the rail fly only when forced to and usually run away through the tangled grass or high and thick reeds so swiftly that they cannot easily be flushed. If it is really the case that they are now but rarely found in Kentucky the fact is an interesting one, and we should be glad to hear more on the subject. It seems likely that the coots in question had been blown out of their course by recent severe storms and this, if true, might account for their inability to fly.

We hope that C. W. B. will advise us of the success which may attend his attempts to domesticate these birds. We believe that they can be domesticated and that they will very likely breed in confinement.

WINTER BIRDS COMING ON.—The appearance of some birds which are with us only during the winter months would seem to hint that cold weather is near at hand. We noticed in Connecticut, Nov. 6, specimens of *Spizella monticola* and *Aegialitis tharion*, and in this city near One Hundred and Fifty-seventh street and Eleventh avenue, a specimen of *Laria leucoptera* was seen feeding on the hemlock cones, Nov. 2.

LATE STAY OF SWALLOWS.—Editor Forest and Stream: On the 13th of October, being at Clark's Island, Plymouth, Mass. I observed a handsome flock of the white-bellied swallow (*T. bicolor*). It seemed as if all the swallows of the eastern part of the State were collected at a single special point of departure. There were certainly one or two thousand of them covering the haystacks on the marsh, the wild plum bushes and every place available for alighting, even the swaying leaves of the beach-grass. At one time when wheeling about over the water they took a notion to alight on the rigging of the sloop yacht *Siren*—no mean rival, by the way, of the swallow in speed, as your columns have recorded in the two seasons—then at anchor off the island, and shortly every part of standing rigging was occupied, and many not finding foot-room there descended to the boom or rail. They perched with almost mathematical regularity, with intervals of say three inches between every two birds (just enough to avoid interference of the wings in alighting I suppose), presenting a very curious appearance, as if the ropes were regularly studded with large knots. When the skipper went aboard and saw this condition of his decks his remark indicated that he held swallows in about the same estimation as Dr. Cows does English sparrows. F. C. BROWNE.

Framingham, Mass., Nov. 4, 1880.

The swallows were certainly late, for they usually leave early in September. The species referred to, however, comes first of all our swallows and is the last to leave us.

In connection with this note we may mention that we saw in this city on the evening of October 24 a night hawk. The bird passed close to us and the identification was unmistakable.

HABITS OF THE BEAVER.—*Vale, Iowa, Nov. 9.*—Editor Forest and Stream: I have just been to the river to visit the beaver dams I mentioned some time ago in FOREST and STREAM. I find they have just completed large new dams, not more than twenty rods from a farmhouse which stands on the bank of the river. There are seven dams within three miles of this town. "Nesnuk" terms these beaver semi-domesticated, which may be true; but if beaver are so shy and so dread the presence of man as Nesnuk would have us believe, how did they become semi-domesticated?

While living on Cedar River in this State some twenty

years ago I have known them to be as tame as the domesticated pig, which is some 300 feet wide and navigable for small steamers. The country is now thoroughly settled, and has been for years, but there are beaver to be found there yet. They only disappear about as fast as they are caught off. There were no beaver near here by a boy only a few days ago. "They have disappeared." E. B. B.

Fish Culture.

THE CULTURE OF CARP.

THE widespread interest manifested in the culture of this fish since its introduction by the U. S. Fish Commission is so great that we are certain that our readers will find the following letters from Mr. Rixford and Herr von Behr, the well-known President of the Deutsche Fischerei Verein, who has done so much for fish culture in Germany, of great interest.

Although we have many fish which excel the carp as a table fish, yet we believe that its introduction will prove of the greatest value in those portions of the country where the warm waters produce nothing edible, and that we could with more profit dispense with any other fresh water fish, outside of the whitefish of the lakes, than the carp, speaking from the fish culturist's and an economical point of view: for there is no fish which in confined waters will turn out so many pounds of food as the carp, and its food costs little or nothing. Its rate of growth here has exceeded that in its native land, and its introduction into American waters will prove to be worth a vast sum within the next ten years to our home-eating farmers, who seldom get a fish dinner. With this preface we give the following correspondence:

RIXFORD, SUWANNEE CO., FLA., NOV. 1.

Editor Forest and Stream: Your favor of the 23d of October covering a very interesting letter from Baron von Behr, came to me in due season. It appears that I am indebted to you for this correspondence, as it was through the medium of the FOREST and STREAM that the Baron's attention was drawn to my letter to Prof. Baird, which you publish, and I cheerfully send you a copy of his letter for your use, as well as a copy of my reply, which you can use or not as you deem best.

GEO. C. RIXFORD.

SCHMOLDOW, in Pomerania (Germany), October 4, 1880.

My dear Mr. Rixford: It is after having read in FOREST and STREAM of Sept. 16 your letter about carp that I take the liberty of writing you some lines.

I have been receiving such manifold assistance from your countrymen in my fishcultural interests, that I am glad to be able, perhaps, to assist you in turn. Prof. Baird will have furnished you with the most needed hints.

I dare say carp will delight in the climate of Florida. They are a fish liking warmth before all, and therefore retire in my climate (Northern Germany) from October to May into the deepest possible mud in the ground of our carp lakes, and seem to slumber there in entire apathy. They spawn with us in May, June and July, the special time depending entirely upon the warmth of the water. We are of the opinion that they are not for spawning something like 15 deg. Reaumur. All this is rather superfluous for you, but now I may be able to give you good hints.

We put branches of different trees—evergreens or others—in the pond a short time before hatching begins, fixing one end of the branch in the soil, and leaving it swing in the pond some inches below the surface. As soon as the carp begin to spawn they fix their glutinous (adhesive) eggs innumerable quantity upon the branches we had put in, but alas! at the same time Mr. and Mrs. Carp begin to eat eagerly their own eggs. It is only in consequence of the enormous quantity of eggs they spawn that the carp is as plentiful as it is. But as for your country, which wishes to get quickly great quantities of young carp, you could make no better arrangement than to take out, after seeing the branches covered with eggs, either these branches (transplanting them in a tub of water in order that the eggs do not get dry) and bring them to a neighboring pond, quite empty of other fishes, or take out the old carp altogether from your spawning pond and leave this alone to the young ones, which after a short time will swarm there by my thousands, and very soon begin to take food of any kind, say cooked potatoes or bread. By giving bread constantly my children got our carp so tame they would come and eat bread from their hands. They get very tame indeed.

The best plan is to have many ponds for the carp all of them being arranged in such a way that they can be made entirely dry. That gives you the possibility of having the carp divided according to their ages—say of one, two, three or four years.

At four years they will grow in your climate to about ten pounds easily. You know that in rare cases we have carp of thirty or forty pounds, while it is nothing unusual to have them up to twenty pounds. If you read German, or have anybody who understands this, my language, I could send you by care of Prof. Baird some books about carp, their breeding and nursing. You know that the Greeks (Aristotle), and old Romans knew this. They came from Italy to Germany in the eleventh century—of course by the monks who were the great protectors of fishes.

In the ponds which contain your carp of two, three and four years you will do wisely to keep with them a few voracious fishes as *Esox* (pike), or similar ones. This seems to prevent their desire to spawn, and therefore assists their quick growing. This principle is generally followed wherever we have large carp culture in Germany or Austria (Bohemia). Beware of having other fishes of a similar family in the same pond with your carp—the crossing gives very bad fishes full of bones and of bad taste.

Now this, my letter, may go. If it reaches you I hope you may find it of a little use. I finish as I began. I got such kind assistance from your countrymen that I shall be very glad to be useful to you. Newspapers make now in a few weeks *le tour de monde*. Let everybody try to make use of

* About 66 degrees Fahrenheit.

them, and be of use through them to mankind. "Good will to Nations" is a beautiful duty. I subscribe myself,

Yours Truly,

President of the German Fisheries Verein.

RIFORD, Fla., Nov. 1.

Brown Boar:

MY DEAR SIR:—Your letter under date of the 10th of October, was forwarded to me through the courtesy of the President and Stream and reached me in due season. Allow me at the outset to express my hearty thanks for your kindness in writing me, as well as for the valuable information you have given. My carp (which are of the scale variety) continue to thrive splendidly, and are a marvel to all who see them—especially those who saw them when I first procured them in November last, when they were only about three inches long—and who now compare them. Many of them are from fifteen to seventeen inches in length, and six to seven inches in breadth. They show no signs as yet of going into winter quarters, coming for their food regularly, and I hope to be successful in carrying them through the cool weather without their resorting to the old habit. I find our natural ponds are not exactly fitted for them, as they are generally deep, and not easily drawn off, with a visible outlet or inlet. Small fish, such as minnows, and perch, generally inhabit them, which were better destroyed, as they will likely feed upon the eggs. Turtles are also plenty, but we must do the best we can to destroy the pests.

Your information that the carp devour their own eggs was new to me, and has suggested the idea to me that possibly at that time they need a different variety of food, and I shall about that time change it to one composed more of meat. At the same time I can protect the losses on which they have deposited their eggs from their depredations by a wire fence. I expect they will spawn in the early spring, say March or April. I will be much obliged to you for any works on their culture that you may send me, as I have friends who will take pleasure in translating them for me, and the publication of them may benefit others who have the fish in other portions of the country. I am sure, I am sure, pardon me for the liberty I have taken in sending a copy of your letter to the FOREST AND STREAM for publication, as the information given will be valuable to many of its readers, and will very likely be copied into many other papers, as the subject is one that is attracting much attention. Your allusion to the assistance that has been afforded you by my countrymen is certainly a compliment to them, and I feel warranted in saying that, as in the past, so in the future, to do all in their power to promote and strengthen the beneficent duty to which they have so pleasantly referred. Allow me to subscribe myself very truly yours,

GEO. C. RIFORD.

THOSE RANGELEY SPAWNING TROUT.

FOETLAND, Me., Nov. 13.

Editor Forest and Stream:

IN FOREST AND STREAM OF NOV. 4, a correspondent ("Fair Play") writes of Rangeley Lakes as follows, in criticizing a mode of bait fishing that he advertises to the uninitiated as being very deadly, etc.: "Parties will be permitted to fish out of season, from the first of October to the first of November, five days took over fifty breeding trout, weighing in the aggregate over two hundred pounds. Every fish was taken off the spawning beds, and no man can say how many young trout, which would have aided in the restocking of that great fishing resort, were destroyed by these captures."

Let "Fair Play" misapprehend the facts and by his strictures mislead others in their inferences I will state briefly that the taking of those fish was in no sense a matter of sport, but of business. The fish taken under permits from the Commissioners were kept alive until ripe, their eggs then taken, impregnated, and placed in a hatching house, and from those eggs will be produced ninety-five per cent. yield of young trout instead, of a probable increase of less than ten per cent. had the fish bred naturally, leaving the majority of their eggs unimpregnated and only such of the balance as escaped destruction to hatch young fish that would be exposed to all the natural enemies during the first few weeks of their existence, when they are so helpless. But it seems idle to repeat what is presumed to be well-known to "Fair Play" and all the readers of FOREST AND STREAM. In taking fish for the purpose of artificial propagation it is impracticable to depend upon sportsmanlike methods. It is purely a matter of business to take the fish without injury and release them alive after the eggs are taken.

The Commissioners realizing fully the great evil that would result in any abuse of our permits for this purpose use all precaution to intrust the business to honorable men. We must of necessity depend upon the noble obligation of the holder of a permit to guard against any possible abuse. My colleague, Hon. E. M. Stillwell, and myself visited Rangeley Lakes early in October, and finding that many of the fish then being taken from Rangeley Stream were "spent," having deposited their eggs, we instructed Messrs. Stanley and Henry to suffer no further delay but to catch the desired number of fish in the most expeditious manner, authorizing the use of a net for the purpose.

At the upper dam a fine lot of trout had been taken and kept in confinement, and none of them were "spent" fish. I stripped a lot of 50,000 eggs in one day there, and liberated the fish used. Mr. Stanley continued to send me the fish taken as fast as they became ripe, and placed the eggs in the hatching house.

We have no reason to believe that any permits have been abused, and regarding the holders of the only permits granted this year as sportsmen and gentlemen we must rely upon their honor that the work shall be so guarded and conducted as to accomplish all the benefits sought and protect us from incurring the abuse that so often is the only recompense received for our efforts to benefit the public.

Should there ever be any wrong committed under the cover of permits granted by us for this important work of fish culture it is within the province and duty of every sportsman and citizen to bring to our knowledge the facts. But we cannot act upon mere insinuations, nor prosecute violations of the law upon charges unsupported by evidence.

We regard our permits as suitably guarded and explicit in their stipulations, and as this is public business all the details are open to public knowledge. Permits to take trout in October for the purposes of propagation at Rangeley Lakes were granted to Messrs. H. O. Stanley and the President of the Quosoc Angling Association, J. H. Kimball, Esq., and a permit to take lake salmon in Dobbs stream and adjacent waters for a similar purpose was granted Harvey Jewell, Esq. The conditions of these permits require that "the fish

shall be returned alive to the waters whence taken and none destroyed for any purpose," and that "the eggs shall be properly taken from all such fish and hatched." Furthermore, "no eggs or young fish shall be disposed of in any manner except by and according to the written direction of the Commissioners."

Under our present laws it lies within the power of any person to bring offenders to justice, and those interested in the enforcement of our fish and game laws should bear in mind that an officer is powerless as regards prosecutions unless there is evidence to accompany complaints. To your correspondent, "Bangor," who dates his letter at Moquean Lake, we would say that we had no funds to employ a special officer to go to the locality mentioned, and we cannot find one who will devote his services to such work solely from a public spirit to do good. The Commissioners had absolutely no more power in the case referred to than "Bangor" himself, nor even as much, as he has evidence to prove his assertions in regard to violations of the law. We do not have the power of arrest such as is held by marsh or police officers, and could not even obtain a warrant on complaint without having in our possession enough evidence to at least show "probable cause" or conviction on trial.

Our duties are too multifarious and continuous to permit personal service as wardens or constables, but we will personally prosecute whenever evidence is put into our possession.

If the necessary appropriations are granted for the use of our Department of State we can have at our command an organized police force with which we can respond to good effect to specific complaints, and have the means to employ special service whenever and wherever it may be needed, and make justice swift and sure. We regret to say that there is much work to be done, but we have truly accomplished a great deal with the few tools at our command, and with our complete equipment we can accomplish still more in the future. We have the will and know the way. Furnish us the means.

EVERETT SMITH.

This plain and straightforward explanation by Commissioner Smith must certainly convince our correspondents that there has been some error on the part of their informants, or that they did not get at all the facts. The commissioners are evidently doing their best to increase the fishing.

THE CULTURE OF THE SUN-FISH.—We learn that Dr. J. J. Seelye, of the "Water Cure," Cleveland, O., has a pond devoted to the little fish which bears the above popular name. The pond is an acre and a half in extent and the quantity of "pumpkin seeds" in it is said to be considerable. Whether he "kisses" it in winter or not our informant saith not. The "sunny" is a lively little fellow, of faith, and a handsome, and the Doctor takes pride in him. Well, he was our first love when we courted him with a pin hook, and many a spanking from the maternal slipper he brought for luring us to the muddy mill pond, to the complete demoralization of trousers. Ah, me! So long ago, and yet but yesterday.

MORE CARP FOR DISTRIBUTION.—The demand for this fish is increasing from all parts of the country, and for the first time the U. S. Fish Commission has been able to meet the demand. They have been sent all over the Southern and Western States, as well as to the East and Canada. Mr. E. G. Blackford, of Fulton Market, New York, is the distributing agent for the East. His first order was for twelve hundred fish. Persons in adjacent States wishing a few may apply to him.

Dr. E. Sterling, of Cleveland, O., has also received twelve hundred for distribution to applicants in his State.

CARP FOR OHIO.—Cleveland, O., Nov. 6.—We received here Monday, the 5th inst., 2,300 European carp through the Smithsonian Institution, of which Prof. Baird is the honorable guardian. They are being well distributed to the many applicants. The introduction of this cultivated fish I consider as one of the best works to the present time of the U. S. Fish Commission, and I doubt if Congress in the last ten years has done better work for the interest of the people than the appropriation it has made for the culture of fish and fish production.

DR. E. STERLING.

FISHWAYS are being constructed in the Contoncook, at Hillsborough Bridge, N. H. Salmon fry were put into the headwaters of that stream two years ago.

Sea and River Fishing.

GRAYLING FISHING IN NORTHERN MICHIGAN.

A VISIT TO THE STURGEON RIVER.

IN the latter part of July last there were encamped on the banks of the Indian River near where it debouches from Bear Lake, the following gentlemen: Messrs. Edmund and Hildbrand, from Columbus, Ohio; Prof. Frank M. of Michigan University; Mr. Keeney, of Cincinnati, Ohio; the veteran steamboat captain and fisher, David Smith, of Cheboygan. It was agreed that after suffering ourselves with lake fishing, where we took captive scores of pounds of muskellunge, pickerel, black bass and perch, we should try our skill on the game beauties of Sturgeon River, which was said to be the best place for grayling fishing about these parts. The day fixed for the expedition was one of the most delightful of the season, and this to our imaginative minds was to be the crowning success of all our pleasure excursions. Getting all things ready, our pack wagon well stored with food for the inner man, and our camp equipage lashed to the box, we jumped into the boat that was to carry us across the river, and in a trice were landed on the opposite shore. Here we found our tent and guide ready to move; our wagon that was to jumble us together over the woolly road, made up in size what it lacked in speed, and its seats were not over-bounding with cushions or springs. We rode "on top," and experienced a kind of elevation that does not belong to the spiritual order. It required all the dexterity of a circus performer to hold on to our seats, and frequently we found ourselves occupying each other's seat when we least expected it. It was the roughest and most animated road I ever passed over, yet in this country it was called a good turnpike. After holding on for two or three hours and all tired with the effort

of keeping our equipage, we halted at an ice-cold spring to take a drink and catch a mess of grass-hoppers for bait. Finding our labors poorly compensated by individual running of grasshoppers, the little jumpers, we conceived the idea of coralling them by means of a mosquito bar close at hand. One taking hold of each end and running in parallel lines and holding the net perpendicularly, we soon succeeded in getting all of this kind of living bait we needed.

At the cry of "all aboard" we jumped on our lofty seats and were soon off again through the woods and over the plains for the Sturgeon River, distant thirteen miles, and at three miles distant from our camp on Silver Lake, about three miles distant from the river. Here we lost one of our wagon tires, and were brought to a temporary halt. It was a desperate out to help remedy the difficulty. Building a huge fire on both for the light and to consume the pesky mosquito, our veteran Captain Smith set about preparing our supper, while the others with hammer and tongs heated and adapted the tire to its lonely felloe. This over, we sat down to supper and long and cold, crackers and potatoes supplied our evening meal, which was enjoyed with a relish. Our camp-fire was to me one of the pleasant features of the trip. Strong and willing arms piled up large logs and fallen trees for a barrier around the fire, causing it to throw its light and cheery warmth directly into our tent, and by fastening back the front flaps we had a warm, dry and inviting bed to spread our blankets for the night's rest. Our camp-fire burned bright and clear, and lying on our lowly beds we could look out beyond the fire and see the beautiful lake in the distance, and the changing shadows caused by its flickering light made a beautiful and weird-like picture, on which we gazed till tired nature's sweet restorer, balmy sleep, threw its soothing mantle over us, from which I did not awaken till the early morning gray told us of approaching day.

The first sound that greeted us was from our musical friend, Hildbrand, who sang "Come Join the Huckleberry Picnic." In a trice we were upon our feet, shouting for Captain Smith to hurry up breakfast. We made our toilet, and the natural refreshments, which differed but a little from our previous supper, except the hog exceeded in bulk the potatoes. The coffee was measured out in infinitesimal doses. Never was coffee better or pork eaten with a keener relish. Our tin plates and cups seemed more inviting than the finest China. As we pulled our chairs around the fire, the first of the morning, we started early on our fishing frolic, three of the party taking on foot. About two miles out our road became impassable for the fallen trees that gridironed it for the space of a quarter of a mile. The only alternative left was to cut a new way wherever the smaller trees and brush permitted access to the passable road beyond. So much time was occupied by this mode of locomotion that we did not reach the dam of the north branch of the Sturgeon till nearly 11 o'clock in the morning. Gathering together our fishing tackle, we hurried down the steep bank, and in a jiffy commenced throwing out for the little beauties, and bets were made as to who should catch the first fish. Some tried the brown-backed fly, others the grasshopper, while the veteran Capt. Smith essayed the red butterfly, a few having been caught on the way. As we walked a pretty sight to see the old pioneer wading into the stream, and casting his line, and some fallen trunk or log to catch the first fish. In an instant a ripple is seen, the hook is taken, and whiz goes the line as it escapes from a reel, and the first grayling is landed with three cheers for the gallant and successful captain. A moment more and a shout goes up at a little distance, and Mr. Hildbrand is declared second winner, he having landed a beautiful half-pounder. As we walked you come, thought I felt all the ecstasy of the occasion, and being so close to the river, I lived in hopes of being the third on the list of successful anglers. But on all sides go up the spirited ejaculation of "Another!" and "Another!" till the sport becomes to me not only monotonous, but absolutely invidious. I conclude my fly is not the thing to entice these game beauties from their favorite haunts, and exchange it for another kind bought of Mr. J. E. Long, of Detroit. Getting ready, we took the first run and spurs out, and in an instant we feel the jerk our spurs out, and now we have caught a perfect beauty of near a pound weight, the largest yet taken. Three of us try our luck fishing down stream; the others move up against the current.

Our camping ground for the night being at the bridge two miles below, where the Gaylord pike crosses the Sturgeon, we fished till three o'clock, having taken all we could count on our fingers and toes, and then we traveled over a quarter of a mile when we struck a thick, impenetrable jungle, and the concentrated smell of a dozen menageries almost stifled us. We peered around in the deep shade and saw the sight of ruin. We smelled, we saw and we almost felt his bare presence, when it was put to vote whether we should go on or seek our way back again to the dam and wait the coming of the other crew, and were voting that we were more unamused, and suiting the action to the word, we skidded, and I assure you your correspondent was not behind in that race, though his spectacles were never seen more. We could not stay to stay there, so made track, on our way back, to enjoy our piscatorial exercise in a less aromatic atmosphere. Either our luck had forsaken us or the fish were all caught about the dam, so we really did nothing but laugh at each other and admire the cool and daring valor that our comrades showed toward smothering the Captain and his comrades in their appearance. After having a hearty laugh over the recital of our bare escape we tugged on with our load of fish and reached camp a little before dark. Our tentmaster had a fire made, tents pitched and everything ready for a gorgeous supper of grayling. The younger members of the party washed and prepared the food, and were eating while the older ones, under the direction of the Captain, were eating the same food as much as possible of their persons from the malicious and persistent attacks of the "no see'ems," as they called the little gray gnats that swarmed like bees around us. One hundred and ninety-three grayling were the number taken, and we lived on these luscious captives till the last one succumbed to our insatiable appetites. This spoiled us for the "hog and homestead" and the next day we spent in the most enjoyable of our lives, a fishing expedition and enjoying the escape which now had become a real and most daring adventure. Turning our faces homeward we reached our camp on the "Indian River," about used up as

THE MIGRATION OF EELS.—About this time, as the almanacs say, look out for a movement of eels from the mill-ponds toward salt water. All eels who pretend to any style at all think it necessary to spend the fall and winter months near the sea-shore, while the poor cousins go into the mud hoping that the neighboring catfish will imagine that they are at Newport

or Nahant among the sea-serpents. The family occupying Esopus Creek, New York, have begun to move, with a few exceptions, who stay behind to see the mud turtles boded down for the winter. In moving a sad accident happened, which we publish for the benefit of other excursion parties of *Apoteles*. While leaving the mill-pond on the creek the advance guard by accident mistook the way and got into the turbine wheel of the grist mill of Jacob Frelich at Saugerties, and many were cut to pieces before the mass of bodies stopped the wheel. Many bushels of eels were killed or captured and their friends at the sea-side will await their arrival in vain.

A MANTIS SHRIMP IN THE EAST RIVER.—Arthur Boyce, of No. 45 Whitehall street, one of our oldest readers, and a noted fisherman of the Black Warrior region, has kindly sent to this office for inspection what he and others regard as a very interesting nondescript. It was caught on the surface of the water, in the slip of the Hamilton Avenue Ferry, New York side. It was swimming apparently in search of food. Captain Peter Silvie, of the above named ferry, captured it in a scoop net on the night of Oct. 21. It proves to be a very fine specimen of the *Squilla empusa*, or Mantis shrimp.

This species of shrimp, though not common in our waters, occurs quite frequently. It is found along our Southern coast as far as eastern Florida. In countries where it is sufficiently abundant the spull is highly esteemed as food.

The specimen captured by Mr. Boyce is an unusually large and very fine one. It has been preserved in alcohol, and is at present at this office.

ANOTHER BIG "SMALL-MOUTHED" BASS—*Cincinnati, O., Oct. 31.*—In issue in your issue of October 28 an account of a black bass of 6½ pounds weight. I also contribute a photograph, but whether of a small or large mouthed bass I won't venture to say. The fish was caught at Middle Island, Lake Erie, in the fall of 1878, by a gentleman, a minister, I believe, of Indianapolis, Ind., and was the first bass he ever caught. The bass weighed 6½ pounds, and was also short a lead sinker. Jno. S. Dollar, Put-in-Bay, O., can furnish direct testimony to the above.

HEAVY BASS.
The picture is that of a "small-mouth black bass" (*Micropterus salmoides*), and the weight given is exactly that of the one sent by Dr. E. Sterling, of Cleveland, and we now think it firmly established that this fish reaches a weight of 6½ lbs. In Lake Erie, but whether it grows as large as that in any other water or not we cannot say, as before the two pictures were sent we doubted its ever growing above 5 lbs. We learn as we live, however, and may yet learn that other large and deep waters contain as large fish of this species. The other one (big mouth) grows very large, especially in Southern waters.

THE ANCHOVY—*Philadelphia, Nov. 12.*—Mr. John A. Ryder, in giving me the account of the eggs of the American anchovy referred to the silver sides, *Chirodoma volata*, not to the so-called spearing, *Engraulis vittatus*. Homo.

We were misled by the common name, never having heard *C. volata* called "anchovy." It is known as "frier" and "sand snelt" in other parts, while "silver sides" is common to both fishes named and also to others. It is important to know what fish Mr. Ryder referred to, and we are glad to be corrected.

ENFORCING FISH LAWS IN NEW JERSEY—*Red Bank, N. J., Nov. 10.*—A case of great interest to the people of the State, particularly to those engaged in the fishing business, has just been decided by the Supreme Court. An act passed April 5, 1873, prohibits the use of seine nets in the Shrewsbury and Navesink rivers. More than a year ago George Curtis, Fish Warden of Monmouth County, caused the arrest of Jehu P. Cooper for dragging a seine in the Navesink River, and at the trial before Justice Jacob Curtis, judgment was given in favor of the Fish Warden. Thereupon the case was removed on certiorari to the Supreme Court, which Court affirmed the judgment of Justice Curtis.

CATFISH TAKE THE FLY—*Trin Lakes, Fla., Nov. 10.*—You have noticed two instances of catfish taking the fly—I add a third. A neighbor fishing in the St. John's last season for bass with the fly caught a catfish that rose finely. Now we have started this thing I think "cats" can be educated.

Ducks lying frequently within a week. S.
THE SILVER BASS OF CANADA—*Quebec, Nov. 11.*—Inclosed please find sketches of fish sent me some time ago, and in reference to silver bass you will see it is the fish you call white lake bass, or *Roccus chrysops*, and is caught only in the Lower Provinces. Black bass are the only kind caught west of the Miramichi. SIMON FRASER.

"DEACON DILL" AT HOME.—"Deacon Dill's" letter in last week's FOREST AND STREAM on "Fishing at Belle Ewart" is well worth reading. We regret that it is too long to reprint. —*Toronto Mail.*

The FOREST AND STREAM presents its compliments to "An Old Subscriber," and respectfully intimates that he ought to know its rules well enough by this time to have signed his name. *Verbum sap.*

PREDESTINARIANISM.—The record of long-distance walking has just been beaten by Rowell in the six days' match at London. The successive performances have been: Weston, 431; O'Leary, 501, 519, 730; Cursey, 521; "Blower" Brown, 512; Weston, 530; Brown, 555; Hart, 567; Rowell, 566.

It takes very little to collect a crowd in New York City. We have seen a whole street blocked up by an eager throng pressing around a mouse trap. The other day there must have been a thousand persons collected in Union Square watching the didoes of an enraged gray squirrel, who was trying to save his peanuts from the thieving sparrows.

—\$500 will be paid for any case that Hop Bitters will not cure or help. Doubt not.

Game Bag and Gun.

GULL ISLAND CLUB.

FOR several years past certain members of the Jersey City Heights Gun Club with others have taken their yearly trip to Southern waters in pursuit of swan, geese and duck. As year by year the water-fowl seemed to decrease or go further South on account of the multiplicity of the shooters, a project often talked of and over by the above mentioned members has finally assumed tangible shape. The Gull Island Club was formed with the following officers and members: Ben Payne, President, J. C. H. G. C.; Livingston Gifford, Secretary, J. C. H. G. C.; A. Heriange, Treasurer, J. C. H. G. C.

Members.—T. Hall, J. C. H. G. C.; R. C. Johnson, J. C. H. G. C.; F. C. Cummings, J. C. H. G. C.; J. H. Van Gilder, J. C. H. G. C.; D. Toffey, J. C. H. G. C.; John J. Toffey, J. C. H. G. C.; Wm. B. Wheeler, J. C. H. G. C.; G. B. Eaton, J. C. H. G. C.; J. B. Burdette, J. C. H. G. C.; F. M. Thomson, J. C. H. G. C.; N. E. Nash, R. L.; Capt. J. Brown, R. L.; E. Z. Wright, Utica, N. Y.; F. Harrison, Newark, N. J. (Essex G. C.); R. Heinrich, Newark, N. J.

A committee with full power, consisting of Thos. Hall and N. E. Nash, was sent down last spring to Pinelink Sound; and Gull Island, noted for its splendid swan and geese shooting, was purchased. Gull Island, about one and three quarters of a mile long by half a mile in width, contains about 200 acres. The club also secured by deed over ten miles of marsh guarding all the points, including several small islands that are contiguous to Gull Island, making one of the finest shooting preserves for water-fowl and snipe in the United States. The laws of North Carolina amply protect property owners in the matter of shooting preserves. The club have erected a substantial club-house, and 17th inst., Al. Heriange (jolly old "South Paw") and Capt. Johnson ("Ye Ancient Mariner"), committee, will ship by Old Dominion Line fifteen cots and mattresses, fifteen comforters and pairs blankets, two stoves (one large cooking and one office do.), together with canned meats, hard tack and other provisions too numerous to mention, to say nothing about the ton and a half, more or less, of ammunition.

Capt. Johnson, Al. Heriange and Nash will start the last of next week for the island to get everything in shape for the rest of the boys, who expect to leave Jersey City, Dec. 4, for a three weeks' shoot.

The club have moreover some 140 live wild geese decoys, that they purchased and are already on the property. Thirteen of the members will positively be on hand at the dedication of the new club-house. As your correspondent proposes to be among the first on the ground and to stay as long as possible, the big stories told, the wonderful shots made and tremendous bags brought in you will probably hear of anon.

Don't you wish you were going yourself?

JACOBSTAFF.

PHILADELPHIA LETTER.

I was told by good authority this morning that there is a movement on foot by the members of the West Jersey Game Protective Association, residents of Pennsylvania and the former mentioned State, to try the experiment of importing from England a large number of English pheasants and liberating them in the five lower counties of New Jersey. I cannot see why such a project would not succeed under the management of this indefatigable society, as its members exercise a great influence over the farmers of this section of the State and many of the latter are a part of the association. I understand a subscription will be made for the purpose, my informant expressing his intention of donating.

Should we be blessed with a mild winter following the importation of the birds, and if he succeeded by a favorable hatching season and a stringent law protecting them for five or ten years be passed, we have no doubt that success will follow the efforts of this model association of sportsmen. The English pheasant is in a measure soon domesticated and will readily be drawn to the barn of the farmer for food in severe winters, and if the proper means be taken to thoroughly interest this class of the community in the enterprise much can be gained in this way for the protection of the birds.

Sportsmen who were at Havre de Grace last week and those who are there at this writing are having great sport duck shooting. The bulk of the fowl being killed, however, are red-heads and black-heads, very few canvas-back having yet come on. Shooting, you know, is allowed on the flats at this point only every other day, as the machines or batteries being moored or anchored directly on the feeding grounds, would soon have a tendency to keep the ducks from visiting them at all if prosecuted every day. As it is the number of canvas backs at Havre de Grace is diminishing every year. We heard of one hundred and twenty-five red-heads and black-heads being killed there in one day last week by one sportsman and his attendant.

We were shown this morning a very remarkable Irish setter dog, the property of our mutual friend Mr. John S. Davis, of Philadelphia. Dash, the youngster in question, was sired by Mr. D. S. Glenn, so well known on the snipe meadows in the neighborhood of Philadelphia, and was broken by John Rickhardt. The dog is of a beautiful deep red, handsome, I think, than his sire, and as Mr. Davis tells me wonderfully staunch at his point and as firm a dog to charge at the report of a gun as he ever saw. Mr. Rickhardt, his breaker, still uses a muzzle-loader and insists upon all his dogs remaining steady after firing until he has leisurely re-charged. All his setters and pointers are as firm. Does not the fact of his use of a muzzle-loader account for the steadiness of his animals? Five years ago your correspondent wrote his views on this subject, and as practical illustration here presents itself the article will be reproduced.

"It was remarked to me a few days ago by a prominent

sportsman of Philadelphia that since the invention of breech-loading shot-guns we have fewer steady dogs at the charge than before, and the reason given was that the reloading of the breech-loader took such a short time the dog naturally became more careless on account of the brief space required of him in which to remain with the gun before advancing; more so also from the fact that the sportsman himself anxious to make a large bag moved forward at once as soon as he had recharged. In old times when we used the ramrod it took some minutes before the sportsman was in readiness, and during this time his dog remained charged and steady until his master had reloaded. This practiced him in obedience and staunchness. In conclusion my friend said to me, "Mark what I say, and I wish you to note it, the man that still uses a muzzle-loader has the best trained dog." I confess I have reason to believe what my friend said, but do not know why one cannot be particular in this branch of the dog's tuition and be more on his guard to have his dog obey. It is a common fault in the hurry of the moment and the excitement of being among a bevy of quail, to push forward too quickly after killing a bird and paying little attention to the dog, now that we can reload so speedily. Our four-footed companions in their eagerness are ever ready to take advantage of the liberality unintentionally given them and forget gradually that part of the education which is so necessary to good sport and success in the field. I find a great many of my friends are breaking their dogs to come in before charging, and they give me as a reason that in cripple shooting, woodcock shooting and the like it is far better to have your setters come to you and charge that you may know where they are before starting them for fresh game. I do not see the utility of the method especially in the case of a retrieving setter or pointer, for in the usual manner of breaking your dog charges at the report of the gun and remains so until he is ordered to seek and bring the bird to you."

Since writing the above I have had many proofs of the correctness of my friend's views, but I would not have it understood that I deny the use of the modern breech-loading shot-gun. Their invention, however, should make us all the more careful that our dogs are not lost sight of and are kept in as full subjection as in the days when the shot poon and powder horn were carried to the field.

I am rapidly becoming a convert to the English style of breaking, never to allow a field dog to retrieve. There are, I know, many opponents to this system, but say what you will, a setter will become unsteady eventually if he is permitted to touch a bird at all. Howso.

THE LONG ISLAND TRAPPED BIRDS.

Editor Forest and Stream:

In the FOREST AND STREAM of November 11, 1880, appeared an anonymous article entitled "Trapped Quail," and signed "A True Lover of the Sport." It was in substance a charge by the writer that a regular business of trapping quail and of the sale, possession and transportation of trapped quail existed on Long Island. It implicated the employees of the Long Island Railroad.

The Long Island Sportsmen's Association, including most of our leading clubs, stands pledged to prosecute all such infractions. We cannot play the part of detectives. We protest against the prevalent custom of making sweeping charges without an iota of proof to support them. We denounce as criminals those possessing such proof who sneak before a pedagogue and have not the manliness to furnish a responsible name.

We demand that your correspondent immediately furnish us sworn evidence of the grave charge made by him or that he forever hold his peace. We will guarantee him exemption from expense. He has rushed into print with full knowledge of the existence of this Association, instead of visiting any of our officers, and we believe his motive was mere covert notoriety and a desire to abuse rather than assist us. We respectfully request hereafter that you publish no anonymous charges against this Association, which you certainly know to be unfounded, but on the contrary that you will insist upon printing the true name of your informant as an evidence of good faith and a duty to us.

By order of the Standing Game Law Committee of the Long Island Sportsmen's Association.

ABRI CROOK,

Secretary L. I. S. A.

The request that the necessary evidence upon which to base an action be furnished is certainly a fair one, and we trust that it may meet with the proper response. As to the "unfounded charges," we may be allowed to suggest that so long as the illegal traffic in trapped birds, now alleged to be carried on along the line of the Long Island Railroad, is not stopped, criticism of game societies is both well-founded and legitimate. Nor can game societies ever hope to accomplish much if they are content to wait for the information volunteered by outsiders. They must "play the detective" themselves. If the Long Island Sportsmen's Association are not prepared to adopt the initiative in such action, we prefer to ascribe this to some other cause than their failure to recognize the propriety and necessity of their undertaking this kind of work. We know that the Association is young, and not yet, perhaps, in trim for solid work; and for that reason it may demand reasonably that its character be not hastily prejudged. It has an extensive field of effort before it, and we are quite confident that the Association is now in the guiding control of men who properly appreciate what a true game protective society should be, and who must ultimately give character to the society.

LONG ISLAND TRAPPED BIRDS.—*New York, Nov. 13, 1880.*—*Editor Forest and Stream:* In reading your editorial of the 11th inst., in regard to my letter Nov. 6, 1880, one might infer that I conveyed you the idea that the employees of the L. I. R. R., were all willful law-breakers. In justice to those men I would say, that they are not being shooters themselves and not knowing trapped game from shot game, might morally be as innocent as the dove or the lamb. They have offered them clean and of course take advantage of it. But let them be stopped from buying or selling game on their train and this will all cease. My letter was intended more for the farmers and their boys who really are the guilty parties. I also notice that in my letter I forgot to insert the word rabbits, when I wrote that the boy hands in from one to six quail or partridges. It should have read, from one to six quail, partridges or rabbits, as the case might be. By inserting the above you will oblige
A TRUE LOVER OF THE SPORT.

SHOOTING IN VIRGINIA.

MYSELF and Dr. Talbot left Pier 42 on the Old Dominion Lineship Manhattan—Captain Kelly and Purser Cleveland, by whom we were treated elegantly. Seen off of course by some Southern Gun Club boys in their usual manner. Arriving in due time at Norfolk, Va., we went from there by cars to Bellefonte, Nottaway Co., Va., where we were received by our kind host, Captain Taylor, formerly of the Forest and Stream staff, a right good sportsman and a pleasant companion. Getting stuffs, baggage and ourselves in shape, we started for Taylor's Retreat, five miles from the depot, where we put our traps in order for the fray. Monday, on quail, three guns, bagged forty-two. Tuesday, two guns, thirty-seven. Wednesday, raining nearly all the day, two guns, twenty-seven. Thursday, seven or three head of game over two guns. Friday, fifty-four and Saturday thirty-seven ducks, etc.

We left for home Sunday night, 5:30, arriving at Norfolk that night, and the next morning went on board the ship Breakwater, Captain Gibbs, a thorough sportsman, who kindly gave us a few hours' shooting with the engineer Lardland, of Major Mulling's plantation, where we bagged seventeen quail, or "right smart gangs of partridge," as the term is in Virginia.

We reached New York Tuesday night well satisfied with our trip, which we enjoyed much.

In reference to the country, game and people I would say the country is fine open plantations of tall grass, wheat or rye wheat and cotton, surrounded by vast pine forests. Deer and turkeys can be shot, but require time and patience. Deer are shot on runways by the use of hounds. Turkeys are first flushed by a dog, then a blind is built where the gunners are concealed, and when the turkey begins to gobble he is answered until close enough for a shot. The quail, generally speaking, close to the pines into which they go "right smart," sometimes alighting in the trees, and of course sportsmen well understand it is useless to try to do anything with them on such occasions. When, however, they go to the open fields, then they begin to collect in the bags. The birds are full grown and fly fast. Most of the grounds are posted, but permission can generally be had by asking for it and by behaving like gentlemen while on the grounds. As far as we were concerned we were used with the very best, and both Dr. Talbot and myself returned all our sincere thanks for the generous hospitality showed us, not forgetting Hanks, our guide, who is a character. His "Look out, there goes Old Turkey," was quite enlightening. Old Aunt Mary was always on hand with her cakes, and the Retreat of Capt. Taylor's was always bright with the sportsmanlike surroundings.

In conclusion would say to sportsman they can find good quail shooting in any direction from Norfolk at a moderate cost. SMOKE.

THE CHASE: ITS HISTORY AND LAWS.

BY THE LORD CHIEF JUSTICE OF ENGLAND.

AT a time when Parliament has recently been occupied relating to game, it has been interesting to pass in review the leading incidents in the history of the chase, and the laws which have regulated its exercise or determined the extent to which property could be asserted or acquired in the wild animals which it is beyond the art or foreign to the purpose of man to domesticate.

From the earliest ages of man's history, the chase has been one of the favorite as well as one of the necessary occupations of mankind. The state of the hunter must have preceded that of the shepherd; it must equally have preceded that of the tiller of the soil, which was probably of still later date than that of the shepherd. In the early stages of his existence man must, in a great degree have depended for food on the animals he was able to capture; and though the facility with which certain kinds of animals could be brought under his dominion might give rise to the pastoral state, a comparatively early period of human existence, yet he would have to wage war with the beasts of prey for the protection of himself and his belongings.

Now, in the beginning, without weapons, or such only as modern discoveries have shown him to have possessed for ages, man can have succeeded in defending himself against the fiercer animals, or in capturing even the least active of those which served him for food, while in their wild and undomesticated state, it is difficult to imagine. Yet his earliest implements have been found in connection with the bones of the lion and bear and other beasts of prey, as well as with the remains of the animals which has served him for food. It was not till after the lapse of ages that, in addition to or superseding those of stone, implements of wood and bone—the harpoon, the lance, and lastly the arrow—the weapons of the slaughtered animals serving for the bowstring—enabled man the better to supply his wants or to cope with his natural enemies.

The domestication of the dog—the animal the most readily attaching itself to man, and in all ages the willing instrument and ally of the hunter—which most probably preceded that of any other animal—would tend materially to improve the position of man with reference to his power over the animals by which he was surrounded. The instinctive habit of the dog, and other animals of the canine race, to hunt in packs, would be observed by man, and after a time would be made available for his purposes.

The domestication of the animals capable of being tamed, and thus rendered subservient to the purposes of man, would be the next step in the onward march of human progress. The cultivation of the soil, and the systematic raising of the cereal products which form so essential a part of man's nourishment, would be an equally important incident in the history of man, but it would not be till after the pastoral and agricultural condition would supersede the calling of the hunter, though it might diminish its importance. The flesh of the wild animals fit for the nourishment of man would still form a valuable article of food—not the less so on account of its savory character—and their skins would be useful for clothing. Above all it would be necessary for the protection of the domesticated animals, as well as for that of man himself, that the number of beasts of prey should be kept down as much as possible. Naturally the discovery of the metals, and their use in the fabrication of weapons, which doubtless had its origin in the East, as well as the manufacture of the net, perfected by the invention of twine and cord now substituted for ruder materials, placed the hunter in a more favorable position for warring with his four-footed enemies. The paramount importance of this warfare could not fail to be appreciated. It is in the primitive period of the world's history

that so much admiration and respect attaches to the character of hunter. It was the duty of the chieftain of the tribe—or, when tribes had grown into a people or nation, of the king—second only to that of leading his warriors and defending his subjects against their foes, to hunt down the wild beasts, which, next to the external enemy, were the terror of the peaceable and industrious inhabitant. Hence, in the legendary hero the character of hunter is commonly associated with that of warrior. The legendary Nimrod is not only a "mighty one in the earth," but also a "mighty hunter before the Lord." The fabulous Ninus was as renowned as a destroyer of wild beasts as he was a conqueror. The legendary heroes of Greece, of whom Xenophon gives a long list, were all renowned as hunters. It suggests itself that their merit as such may have contributed much to procure for them the character of heroes and the admiration of mankind as their other exploits or virtues. "A conqueror and founder of an empire," says Mr. Layard—herein correctly expressing the sentiments of the ancient world—"was at the same time a great hunter. His courage, wisdom, and dexterity were as much shown in encounters with wild animals as in martial exploits. He rendered equal service to his subjects, whether he cleared the country of beasts of prey or of his enemies."

The keeping down the number of the beasts of prey, as one of the duties of kings and rulers, appears to have been fully recognized from an early period, at least in the Eastern world, where the fiercer and more destructive forms of animal life were un happily far too abundant to be consistent with the welfare or safety of man. The frequent representations in the Assyrian sculptures of kings and warriors going to give battle to the principal beasts of prey is very justly referred to by Mr. Layard as a proof not only of the chase being deemed the fitting occupation of a king, but also of the high estimation in which it was held by the primitive inhabitants of Assyria. The sculptures of the palaces of Nineveh and Babylon, made known to us by Messrs. Layard and Botta, exhibit, in all its energy, the royal sport of some thirty centuries ago, when a king of Assyria or of Babylon would go forth to give battle to the monsters of the forest or the plain. In the Assyrian bas-reliefs the king is represented, when hunting, as in his war-chariot, well furnished with arrows, darts and spears, and as accompanied by warriors fully equipped for fighting. The same thing took place in the neighboring kingdoms. We are told by the Greek writers that in Persia the kings went out on such occasions at the head of a large force, as on a military expedition, the king spreading his war-chariot, which he used as a chariot, and sometimes occupying several days. Xenophon describes a Persian king, when going forth on such an expedition, as accompanied by half his guard, each man fully armed as if he were going into battle. Kings and great men were proud to have the fact that they had been hunters and slayers of lions and wild beasts inscribed on their monuments. Darius is said to have desired to have it stated on his tomb that he had been an excellent hunter, as well as a steadfast friend and good horseman, and one to whom nothing had been impossible.

But hunting was not confined in these countries to kings or their attendants, or to the pursuit of the more ferocious animals alone. Game was abundant, and the love of the chase universal. Mr. Layard is supposed to ascribe to the Assyrians the first establishment of the inclosed parks, which at a later period were introduced into Europe by the kings and great men. In these parks game of every description was preserved for the purpose of sport—according to Greek writers, lions, tigers, and other beasts of prey, as well as ordinary game. But this may well be doubted, as the destruction of the other animals, if shut up with the beasts of prey, would have been such as in a very short time to leave nothing but the latter. When, therefore, lions and tigers were the beasts of prey, the hunt was not a very profitable one; the probability is that, if this took place in fact, the animals had been captured and purposely introduced, with a view to their being forthwith hunted and killed. In a series of bas-reliefs, discovered at Kouyunkik, and now in the British Museum, the king is exhibited hunting lions, which are turned out of cages in which they have been brought to the hunting grounds. That at a later period wild beasts were taken alive for the purpose of being afterward killed is, of course, a well-known fact.

The Babylonians appear to have been as keen sportsmen as the Assyrians. We now know from the modern discoveries that the walls of their temples and palaces were ornamented with pictures and sculptures representing the chase; and similar subjects were even embroidered on their garments.

As appears from the bas-reliefs, the animals hunted were besides the beasts of prey, the wild goat or ibex, the wild ox, and the different kinds of antelope and deer, the wild goat and the hare. The game, if it escaped the arrow of the hunter, as caught with the lasso, or driven into the nets and so taken, or was run down by large and powerful hounds.

Like their Assyrian neighbors and congeners, the Egyptians were ardent followers of the chase. Lion-hunting, we are told by Sir Gardner Wilkinson, speaking from the representations on the tombs, was a frequent occupation of the kings, who were proud to have their success on such occasions recorded. Anumoph, the Third husband of having destroyed no less than 102 head in one battue. Ethiopia, in which lions abounded, was the principal scene of this sport, but lions were also to be found in the deserts of Egypt. Athenæus mentions one as having been killed by the Emperor Hadrian when hunting in the neighborhood of Alexandria. According to Sir Gardner Wilkinson, the same sometimes went far into the desert in the pursuit of elephants. He does not mention whether any representation of an elephant hunt is to be found on the monuments. The taste for hunting Sir Gardner tells us, was general with all classes. The aristocracy had their parks for preserving game in the valley of the Nile, which, though on a less extensive scale than those of their Asiatic neighbors, were still sufficiently large to enable them to fully enjoy the sport.

The animals which were chiefly hunted were the hare, the gazelle, the stag and other deer, the wild goat or ibex, the ox, the wild ox, the kesh or wild sheep and the porcupine. The ostrich, too, was pursued for the sake of its plumes, which were highly valued by the Egyptians.

One form of sport in which they indulged was that of pursuing the game with dogs, which, however, do not appear to have been used on such occasions for the purpose of hunting the game, but were kept in slips, ready to let go as soon as the game was started. If the dogs succeeded in catching the animal, well and good; but generally their speed was not trusted to alone, though this might sometimes be done. Usually the sportsman followed in his chariot, and, urging his horses to their utmost speed, endeavored to intercept the object of pursuit, or to get sufficiently near as to enable him to shoot with effect. When the animal of his quality prevented the use of the chariot, the hunter, taking advantage of

the sinuities of the ground, endeavored to get within reach of the game as it doubled, and to bring it down with an arrow. The horned animals of the larger kind, such as the stox, oryx or wild ox, if wounded only, sometimes turned on the hunters, and required the spear of the hunter to dispatch them.

Sometimes, especially when they wished to take the animals alive for the purpose of placing them in the parks, they caught them with the lasso or noose, in the use of which the Egyptian huntsmen appear to have been extremely skillful, throwing the noose around the neck of the gazelle or deer or over the horns of the wild ox.

It may not be uninteresting to observe that while the Egyptians had several varieties of dogs—some of them three-toed (Gardiner Wilkinson's description of *Canis thersoides* for their peculiar vigour)—probably the pet dogs of the Egyptian ladies—the hound, as, e. g., exhibited in drawing 236 of Sir Gardner Wilkinson's work, has, as with us, its peculiar and unmistakable characteristics. The hound in the Egyptian painting would give one the idea of a cross between the English harrier and foxhound, though perhaps a little taller and longer than the former and lighter than the latter. The kind of dog which was used by the Egyptians for the great hunt sometimes hunted with lions tamed and trained, as the cheetahs are in India, expressly for hunting. In No. 240 of Sir Gardner Wilkinson's drawings is the representation of a lion, with which the chasseur is hunting, and which has just seized an ibex.

When sport was desired on a larger scale than could be had in the immediate vicinity of the Nile, where the land was cultivated and thickly peopled, it was sought in the neighboring deserts. When this was to be done a considerable extent of ground was inclosed by nets, into which the animals were driven by beaters, the place chosen for fixing the nets being, if possible, across narrow valleys of torrent beds, lying between rocky hills. In the Egyptian paintings these long nets are represented as surrounding the space in which the hunt is to be carried on. The net used for this purpose was described by Sir Gardner Wilkinson, and the description, responding as it does with that given by Xenophon, may be taken as perfectly describing the nets in universal use in the ancient world. "The long net was furnished with several ropes, and was supported on forked poles, varying in length to correspond with the inequalities of the ground, and was contrived as to inclose any space, by crossing hills, valleys or rivers, and by the use of the water as a barrier to the net itself. Smaller nets for stopping game were also used; and a circular snare, set round with wooden or metal nails, and attached by a rope to a log of wood, and used for catching deer, resembled one still made by the Arabs." Being thus inclosed, the game was started by beaters with dogs, the sportsmen being so placed as to watch the animals or to get within reach of them with the bow. A spirited sketch of a chase in the desert of Thebaid, copied by Sir Gardner Wilkinson from a tomb at Thebes, gives a vivid representation of such a hunting scene. Hares, deer, gazelles, wild oxen, the ibex, the oryx and ostriches, together with foxes and hyenas, pursued by hounds, are dashing at full speed across the plain, while in the midst of them is a porcupine who is taking things very coolly, as if conscious that his rate of speed was by no means equal to that of his pursuers, and that any attempt to keep up with them would lead to his destruction. The hunter on occasions would appear to have been very sporty.

In one respect the Egyptians were sportsmen in the manner in which we should use that term. Except in these battues in the desert they appear to have killed and taken the animals which could properly be called game only in open sport. They employed no snares or traps for the purpose. The more common wild animals, such as hares, foxes, jackals, wolves, jackals, foxes, were not only hunted for amusement, but might be destroyed by the peasant, to whose herds or farm-yards they were standing enemies, in any way in which they could be taken. The poacher appears to have been unknown.

Not less striking than their hunting was the fowling of the Egyptians. The lakes and the marsh-banks of the Nile, and the life, have ever been the resort of innumerable wild fowl. Hence fowling appears to have been a general pursuit. The professional fowler, who followed it for his livelihood, used nets and traps; but the sportsman brought the bird down with the throw-stick—a stick made of heavy wood, from a foot and a quarter to two feet in length, and about an inch and a half in breadth, slightly curved at the end, and with which, being cast, and thus becoming a sort of javelin, from the air in its flight, could be thrown to a distance, and, when thrown by a dexterous hand, with considerable accuracy of aim. The method of proceeding appears to have been to creep in punts made of the papyrus as noiselessly as possible into the reeds, the height of which concealed their approach, till the birds rising, the sportsman was enabled to use the throw-stick, an attendant being at hand, who, as fast as one stick was thrown, supplied another. Three of the most spirited sketches in Sir Gardner Wilkinson's collection are representations of such fowling parties. Strange to say, in two of them there appears a cat, employed to act the part of a retriever in getting the fallen birds out of the thicket.

No trace of hawking is to be found in the Egyptian paintings. The use of the hawk species for the purpose of the hunt appears to have been unknown to the Egyptians, as also to the Asiatics.

From their early contact with the Egyptians it might have been expected that the Jews would have acquired a taste for hunting, but this does not appear to have been the case. They had, no doubt, occasion to destroy the beasts of prey for the protection of their flocks and herds. From the legend of Samson, and the statement ascribed to David, he had slain a lion, and thus, in the story of the Pentateuch, who is said to have slain a lion in a pit in time of trouble, it would appear that lions, though there is no reason to suppose them to have been numerous, were occasionally troublesome in Judea. Several allusions in the Bible also show the various devices for taking both ground and winged game were not unknown to the Jews; and the express enumeration of harts, roebucks and fallow deer among the game which daily supplied the king's table in the story of Solomon, shows that the game of this description was not wanting in Judea, and that its capture was not neglected. But there is nothing to lead us to suppose that hunting or fowling was generally pursued as an amusement, or on an extensive scale, in Egypt or Assyria. The prohibition as to eating the flesh of certain animals, as the wild swine, the hare and the porcupine, elsewhere the objects of pursuit but forbidden to the Jews, is not so welcome to man—though we are at a loss to see why the flesh of an animal which chews the cud but does not divide the hoof should necessarily be unfit for man, and still less

so to account for the lawgiver having fallen into the mistake of supposing that the hare and coney were animals which chewed the cud—may have tended to check the practice of hunting, the pursuit of the hare and the wild boar, especially the former, forming generally so large a portion of the hunter's occupation. It does not appear from the Bible that the Jews availed themselves of the service of the dog in the pursuit of game. Possibly the prohibition contained in the seventh chapter of Leviticus against eating the flesh of any animal that had *been*, may have led to the non-use of the dog, a serious drawback to the success of the hunter, and which would necessitate the use of the snare, the trap and the pitfall in substitution for the chase.—*Nineteenth Century*.

[TO BE CONTINUED.]

PRIZES FOR THE STATE CONVENTION.—The Prize Committee for the State Convention, appointed by the Long Island Sportsmen's Association, are: Chas. W. Wingert, chairman; A. Eddy, Chas. W. Rodman, Leslie Wild, also Presidents; Abel Crook, G. A. Chappell, Dr. Aten, Dr. Wynne, Austin Appleby, Judge Henry S. Scott, C. W. Hameyner, Chas. E. Fiske, Henry Altenbrand and Samuel S. Conant.

Orders for voluntary prizes should be sent to Chas. W. Wingert, No. 54 South Portland Ave., Brooklyn; or to Abel Crook, Bennett Building, No. 93 Nassau street, New York city. All prizes are to be delivered by March, 1881, to enable proper classification and preparation of programmes and advertisements.

GUNS IN PASSENGER CARS.—Different regulations are in force on different railroads respecting the carriage of guns in passenger cars, and these rules are in each case, we opine, made for the purpose of securing to the general traveling public the greatest security and convenience. Some roads do not permit a man to take his gun or rifle into the car with him; and there are several very good reasons why this rule should be enforced, primarily on the deference to the rights of others, and particularly of the lady passengers. On the other hand, the sportsman who possesses a costly gun hesitates to entrust it to the tender mercies of employes. But we have traveled extensively over the railroads of this country and have never found any trouble in satisfactorily disposing of our arms and ammunition. A slight fee to the porter or a special word to the baggage-master has always secured from them satisfactory care in handling and keeping in safety.

We received not long ago a letter relative to this subject, a proof of which was transmitted to the General Passenger and Ticket Agent of the road in question, and below we publish the letter and the reply from the agent:

Editor Forest and Stream:

I have returned from a hunting trip in Dakota, and for the benefit of fellow sportsmen I desire to acquaint them with the inconvenience they will be put to should they patronize the line of the Pittsburgh, Chicago and Fort Wayne Railroad.

Should any sportsman attempt to enter the passenger-cars of that company with his favorite rifle, endeared by many long and fatal shots, no matter if the weapon be carefully encased in a neat cover, he will be met at the door by what others first journeyed to the owner of the road, by the officiousness of the individual, but who will prove to be the brakeman, who, in an insulting manner, will order you out of the car, or prevent you entering with your gun, no matter how carefully covered. Now you can imagine the feelings of a sportsman who is obliged to consign his rifle to the baggage-car without check, fee the baggage-porter, and trust to luck that your gun goes through the journey unharmed.

The New York Express arrives in Pittsburgh about 2 o'clock in the morning; all the baggage is charged to another car, and one must be on hand at that hour to take charge of his gun.

Nearly all of the railroads in the West extend to the sportsman many courtesies, and if this road should prohibit sportsmen with uncovered guns, accompanied with dogs, from entering first-class railway coaches it would be to their credit; but to a fatigued traveler, with a gun in a neat case, to be obliged to pass it over to the tender mercies of a baggage-smasher makes one pass a series of vexations, among which are to rush into the fostering care of the Forest and Stream, Men open to protect her patron huntsman, and a determination to advise all of your sporting friends who contemplate visiting the West, not to go via Pittsburgh, Chicago and Fort Wayne Railroad.

Editor Forest and Stream:

Chicago, Nov. 9. I have received your kind note of the 4th inst., with copy of article by "Trajectory" for which I am much obliged. The subject of carrying of guns and fixed ammunition in our passenger coaches has had full and serious consideration, and if sportsmen would contemplate the danger to which a carload of passengers are exposed from such explosive materials they would not ask us to thus expose them. Sportsmen with guns in cases must always have a quantity of unused ammunition, and should an accident occur to the train this amount of death-dealing material would, or might, seriously jeopardize the lives of not only the sportsmen, but all others in the car. I can readily see the inconvenience to this class of our patrons from not having their guns checked as any other baggage, and I can see no reason why guns in cases should not be checked, except that then the company would assume a responsibility which would not necessarily any compensation for it. Men's guns are very valuable, and my experience with a borrowed one fully impresses me with an idea of how much a sportsman values his own. I trust you will not publish this as coming from me. I am modest and do not want to see my name in print, but you can rest assured that I will establish any rule which I can do consistently to avoid any cause of complaint such as this gentleman makes.

FLORIDA RESORTS.—Putnam, Nov. 8.—It may be interesting to many of your readers to know one of the most desirable places in all Florida for a hunting visit. I would recommend Bay Port, for I have just received a letter from my friend there, who writes that that game is very abundant, there having been no hunting there since I was there three years since. Bay Port is situated fifty miles south of Cedar Keys, on a point of land at the mouth of the Wachapreague River, a swift clear stream abounding in fish and waterfowl and other. A mail steamer touches twice a week also two miles from the interior. The Gulf Hammock is just one mile on the east side while the waters of the Gulf bound the west. A little place of eight families, the nearest village, is

twenty miles inland, and the Gulf hammock, six miles wide, abounds in deer, wild turkeys, bear and game of lesser size with catamount and an occasional panther. Mrs. Garrison, of Connecticut, has a very desirable hotel or boarding house. I stopped there one winter, and with her New England cooking, soft beds and homelike comforts I enjoyed myself more there than in any other place in all Florida—and I have spent seven winters in the State, for I prefer comforts combined with sporting to roughing it. There are some deer and four boats always to be had free, and pushing out 100 feet, one has to be lively to attend to a line for trout, black bass, jack, red fish, channel bass, red snappers, groupers, sheep heads, sailer's choice and many other kinds of fish abound. I never saw fish in such abundance in any other place in my life. A mile and a half tramp into the Gulf Hammock brings you to the first deer crossing, where deer paths are worn like sheep paths. Two Kentucky gentlemen located their families four years ago on the pine lands, just six miles from here, for the purpose of raising and raising stock, but the deer and wild turkeys ate up their garden and the panthers and bears ate up their stock, and they abandoned their dwelling, which still stands there empty. Board can be obtained, and is solicited by Mrs. Garrison, at \$4 per week, and she reserves the oranges on the large trees in front of her house for the special benefit of her guests. Among other things he sure and take with you two or three large steel traps that will hold a bear or otter. The other abound, and those I caught there I sold for \$4 each in Boston. I am sure I could catch a dozen a month with three or four traps. My friend writes he never saw so many semi-tropical birds there before as are there this year. G. F. WILLIS.

NEBRASKA GAME.—The *Omaha Herald* of a late date says: "The fine bag of game made by S. A. Tucker, representative of the Parker gun, of Meriden, Conn., and J. W. Petty, of this city, on their expedition Monday, shows the possibilities of hunting on Nebraska waters. Famous bags have been made heretofore on the North Nebraska lakes and along the southern shore of the Platte, and this last achievement comes simply to emphasize what they had already proclaimed. In one day's shooting Messrs. Tucker and Petty, hunting along the Platte River between Clark's and Silver Creek, about 115 miles west of Omaha, captured 64 geese, 8 ducks and 12 quail. There is no doubt but that if they had cared to shoot more they could have bagged a hundred birds; but they did not know what to do with all they had, and were not disposed to slaughter uselessly. Neither is there any doubt that they could have gone out on the following day and with proper management have brought down a hundred more." "Mr. Tucker is an enthusiastic and observant sportsman, and his business takes him to all parts of the country, where he has splendid opportunities for shooting. He has studied the feeding grounds and habits of sea fowl, particularly of ducks and geese. In view of these things a *Herald* reporter sought Mr. Tucker's opinion on the hunting along the Platte as compared with what he had seen elsewhere.

"Mr. Tucker said: 'I think there is no place in the United States this side of the mountains where a man can get so large a bag as on the Platte River. I have shot on the Sacramento River in California, on the Currutuck Sound, North Carolina, and at other famous localities for years, nearly all over the United States.'

"We find the Canada goose," he added, "as far east as Maine, but they winter as far South as Currutuck Sound. The Hutchins and snow geese are not found in large numbers there, and the white front, or western brant, which is also abundant here is very scarce there. I shall try to find, on my next trip to South Carolina, white fronts and snow geese winter. They do not get as far East as New York, and I presume they winter in Texas."

NORTH CAROLINA GAME GROUNDS.—*Warrenton, N. C.*, Nov. 8.—I notice in a recent issue of your paper an inquiry from some Northern gentleman asking where good quail shooting could be found in North Carolina. Answer in nearly every part of our State, and it is very good in this section of it. This (Warren) County is bisected by the Raleigh and Gaston Railroad, and Warrenton, its county seat, a pleasant town of fifteen hundred people, on the railroad, is ten miles from Weldon by rail, twelve hours' of New York, and four of Pittsburg, Norfolk and Richmond. It has a daily Northern and Southern mail. It is no great work for a couple of good shots to bag from seventy-five to a hundred partridges in a day. In addition to partridges, which are numerous because of the dry summer, deer are plentiful and three or four fine bucks are sometimes killed in one day by the same party of sportsmen. Squirrels, old hares and coons also abound. The Roanoke River, ten miles distant, is covered with wild geese from December to February. Six or eight varieties of ducks—some very fine—abound in cold waters on our creeks and ponds.

Fox hunting is also one of our best sports. The hunting here, however, is rougher than up North because we have less cultivated land. I have frequently seen five full coveys of birds in a ten acre field. We have but little "posted" land, and every one can hunt pretty much where he wishes. If your Northern friends wish good sport let them come down and they will get it—also a kind welcome. Our reasons for wanting intelligent Northern gentlemen to visit us are patent. Any Northern gentleman who wishes to spend with us a pleasant, though possibly monotonous winter so far as the aches, etc., are concerned, will be treated just as gentlemen know how to treat each other. Our hotel, the Carolina House, is well kept, and is a model of neatness and comfort. So come to Warrenton, Warren County, N. C., and we will try to make your time pass pleasantly. Short.

CHICAGO, Nov. 8.—Good shooting continues in this vicinity, and game seems more plenty than ever before. Mr. George Farmer, of this city, just returned from a week's shoot at Senachwine, where he bagged 175 ducks and two geese of the class known as the "wavy" or snow geese. These, I am informed, are the first of this kind ever killed in this vicinity, their flight when migrating being usually through Montana. J.

The geese referred to are probably snow geese (*Anser hyemalis*) and not waxes (*A. rossii*). **CHICAGO—Nov. 13.**—Messrs. Slade, Mears, Cowles and Oliver, of this city, returned yesterday from the woods of Wisconsin, where they had been spending the past ten days. Besides good bags of small game, they returned with twenty-nine deer. The following item, clipped from the *Daily News* of this city, may interest you: "The succulent prairie chicken, which formerly was exported to the East from Illinois, Wisconsin and other States on the alluvials of the Mississippi, the New York journals now state is taken to that

market almost entirely from the prairies beyond the Mississippi. The reason given is that Illinois, Michigan, Indiana and Wisconsin have become so depleted that they can afford to export but very few. It is stated that formerly the fine bird was abundant all through Northern New England and the Middle States, where it was long known as moor-hen and moor-fowl. The plains and pine-barrens of Long Island and New Jersey were especially its favorite resorts. Unlike its wild cousin, the prairie chicken, however, this bird could not withstand the pressure of civilization, and migrated to its present ranges on the Minnesota and Nebraska plains. But may not the New York journals be mistaken as to the falling off in the numbers of the birds in the States named? They forget that the Western people are growing rich, and can now afford to eat that which we formerly were compelled to sell." J.

NEBRASKA GAME.—*North Platte, Nov. 3.*—If any of the sportsmen of the East want a good place for sport in the autumn here, Game of all kinds, deer, antelope, elk, ducks, etc. One man killed twenty-four deer, thirty miles from here, up the North Platte, in two days. A man killed two ducks to-day, and brought them into my store, of a kind I have never seen. They have a topknot on their heads two inches long. Can you tell me what kind of ducks they are? Major North came to-day from his ranch on the Disual River, sixty miles from here, and reports game of all kinds out there thick—the best shooting for years. The Major is the best pistol shot in the West, and killed two deer with his woad coming in. By the way, thanks for that Ditum powder *cypher*. I am a dealer, and had two dozen cans on hand when I received your issue of Sept. 23. Those cans are now at the bottom of the North Platte River. I could not afford to take the risk of selling them. M.

The ducks mentioned may have been wood ducks, though it is impossible to identify them from so meagre a description.

HAMMERLESS GUNS.—*Providence, R. I.*, Nov. 13.—I would certainly advise your correspondent A. B. C. to purchase a hammerless gun. I have used a first quality W. W. Greener hammerless gun (which was made to order through his agent Henry C. Squires) since the commencement of last season. I am perfectly satisfied with its performance, and consider it a valuable improvement over the old style of hammer guns. The relief from the catching of hammers in brush, briars and in boat adds greatly to the safety and comfort of shooting. There is no reason why the hammerless guns should become shabby sooner than the old style. The action plate is made shabby to increase the leverage and make the cocking easier, but is compensated for by increased thickness of the plate and extension of the rib.

It will probably be but a few years before the breech loader with hammers will be classed with the obsolete muzzle loader. Gun makers and dealers will not push the sale of hammerless guns until their stock of the old style is disposed of. F. H.

THROUGH TO THE MISSOURI.—The Chicago and North Western Railroad has extended its Central Dakota line to Fort Pierre, on the east bank of the Missouri, in nearly an air line east of Deadwood. The North Western Stage Express and Transportation Company run a daily line of Concord stages for first and second class passengers, between Fort Pierre and Deadwood, and a line of fast express wagons for third class passengers and freight. The distance from Chicago to Fort Pierre by rail is 780 miles, time 34 hours. The distance from Fort Pierre to Deadwood by stage is 180 miles, time 30 hours. Baggage destined to any point in the Black Hills can be checked to Fort Pierre. The railroad carries 150 lbs. free for each passenger. The stage carries 20 lbs. free. The fare from Chicago to Deadwood is, first class, \$49 25; second class, \$40; third class, \$30.

IOWA—Dubuque, Nov. 12.—Everything in the shooting line is quiet at present, and we won't have much until spring. Duck shooting was unusually good for a short time, but the weather turned rough so suddenly that most of the boys missed the golden opportunity and only those that happened out on the time had any success. A party of three killed 130, mostly mallards, in about four days' shooting. Their shooting was done on the river about 80 miles north of here; and another party of four who went later killed some 250, but considering the weather both had poor luck. Jacksnipe were very plenty and could have been killed in large numbers, but all were after ducks. Ruffed grouse are in their prime now, and a good bag can be made by taking a little trouble. Quail scarce and hard to find. J. L. E.

RUFFED GROUSE TREESING.—*New York, Nov. 15.*—In reading the latest issue of your valued paper I noticed the article from "F. P." relating his experience as to the habits of the ruffed grouse.

I wish to say that my experience does not agree with his, because when on a shooting trip last season, and while hunting for ruffed grouse, a bird flushed while the dog was yet twenty yards away, and flew to the branches of a tall oak on which he rested for a second and then darted away.

With quail I have had on one occasion a similar experience. While shooting on the "first" this season I flushed a bevy of quail, one of which I noticed flew to a tree.

It of course remained there only an instant. A. S. P.

KENTUCKY—Christian County.—Game of all kinds scarce here this season. The largest bag of quail heard of was made by Will. Gaul and Geo. Mcgarity, twenty-six in one day. Tennessee is reported to have a great many this season. Party from here going there in a few days. Will report when they return. F. L. E.

MALLARD SHOOTING IN INDIANA.—*Vincennes.*—There has been great mallard shooting here. The storm on the northern lakes two weeks ago sent down thousands of ducks. Three men, J. M. Sheer, Richard Roe and A. McMeintz, of East St. Louis, Mo., killed 137 mallards in one evening and morning at Ellison Prairie, seven miles away. There are plenty of snipe and a fair scattering of woodcock.

CONNECTICUT—New Haven.—Some of the local sporting men were out yesterday, and returned with good strings of hare, quail and quail. Penn and Potter 16, Penn and Potter 16, a Haden man 15, and David and Henry Cowell, who were out only a short time, 8.

CAMP STOVES.—*Salt Lake City, Nov. 4.*—I would like to ask if any of your correspondents have found a good stove to take on a camping trip that will do to put up in a tent and

It was reported that there were at least two hundred and

distance had seen the duck and tried to obtain him. By this time they are near here. I hear the whistle of the wings. The trusty breech-loader comes up like a feather and the charge leaves the muzzle. Yes, he dropped. I had aimed some six feet ahead, and by the time Zoro had retrieved the duck a faint burrah was borne to my ears. A true sportsman had congratulated me. When the boys came in two were at the tents and met me, immediately picking up my duds and allowing me to walk in with not a shell's weight. We had scolded. The duck was twenty-nine inches long, over forty the extent of wings, and weighed over five pounds, and often now I glance toward the big mallard.

BERT. NAVARRE.

"NESSMUK" writes: "I am among the oldest canoeists in the United States. Have a record of over forty years, and am frosted cast iron for the double-bladed paddle as against oars or canvas. Shall go through further and faster next season than I did this, and with a longer, larger canoe, say of twenty-five pounds weight and of racing model. I take no guide—I am a guide myself wherever I can get a clean four inches of water. I am never half as much at home and never find myself so easy as when I am lost in one of our forests, where there is no track or trail, save of the wary natives I thus meet."

TEXAS—*Indimola*, Nov. 6.—Game now in abundance and continually arriving. Saw several flocks of swan this morning, the first of the season, and a great many geese and brant. Was out this morning close to town and bagged one fine goose, one brant and a brace of fine ducks, and was not gone from home altogether over one hour and a half. Every cold snap there is a regular fusillade at the passing fowl—every one who owns a gun or musket turns out. G. A.

SHEEP VS. DEER.—It has been a frequent complaint in Scotland that a potent cause of many evils, especially depopulation and high-priced meat, was the large extent of the lands devoted to deer forests instead of to sheep culture. Attention has been called to the subject by a discussion in the *London Times*. In 1873 a select committee of the House of Commons was appointed to inquire into the merits of the case, and that committee reported that the evidence bore out none of the charges.

—The *Scientific American* of last week contains two full-page illustrations of Captain Eads' proposed railway for transporting ships with their cargo across continents. Captain Eads claims by his plan to be able to take loaded ships of the largest tonnage from one ocean to another across the Isthmus of Panama, as readily as can be done by a canal after the Lesseps plan, and at a much less cost for engineering construction.

—No one can be sick if the stomach, blood, liver and kidneys are well. Hop Bitters keeps them well.

The Rifle.

PLEASE VISIT THE RANGES—*Charleston, S. C.*, Nov. 8.—Seeing what Mr. Murphy, of Worcester, has done in shooting, I send you this: Oct. 16, 45 shots, one hundred measured rods, at 10-inch bulls-eyes; other way third-class target, he made 32 bulls, 10 centres and 3 inners. Nov. 1, 40 shots, 500 yards, at 8-inch bull and four-foot target. Score—29 bulls and 8 centres; 22-inch, 2 inners. One outer the first shot.

The shooting was done by James Pixley, of Otsego County, in the presence of ten or twelve persons. He has now returned home. Sight on heel of gun. He used Remington Creedmoor rifle, 107 grs. Hazard, 550 bullet, his gun kicking so one would think it was impossible to hit anything across a barn-yard. He did his first shooting at long range this summer; first score was 179, last 217. Is also splendid off-hand shot. Will sight his gun on anything, distance unknown, quickest of any man I ever saw. When he shoots he always paces to see how far, and calculates his elevation from this. J. B. H.

NEAR-SIGHTEDNESS.

IN your issue of October 21 I see a communication from "Phila." on the subject of near-sighted persons shooting with glasses. Having had much experience as a near-sighted shot for the last seven years, and as your correspondent's case seems so similar to my own when I first began to use the glassy ovals, I venture to give a small bit of personal history which may probably interest other near-sighted sportsmen.

From earliest childhood I have been an ardent lover of every kind of shooting. As a youngster, too small to walk, I followed the hunters on my pony, my older friends kindly pulling down the rail fences for my passage. Near-sighted! I never thought of it. Grown older and swinging my light squirrel rifle I found I could kill more than my school-mates, but one or two of them could always beat me shooting at a mark. I would not admit even to myself that I was near-sighted. In fact I doubt if such a thought ever entered my head in those days. Yet how distinctly I even now remember what a large, dim, hazy look each scrap of white paper assumed that was put up for a target. In 1873 I began my college course in New York city. Troubled in copying the intricate formula from the board, and seeing others with glasses, I borrowed a pair from a class-mate, and oh! wonders! I hadn't imagined any one could see so plainly. Returning home I resumed my hunting and target practice, always using glasses, feeling convinced it was the only way for me ever to become an excellent shot. For two years how it troubled me to see that front sight plainly; a thing very easy to do without the spectacles. I painted it every color of the rainbow. But in the two years' practice I had trained my eyes so as to see the naked gray sight on a long Springfield rifle as plainly as any one could wish. How well, my winning many successive prizes can testify. In my earliest experiments I discarded eye-glasses completely, as, no matter how good, they are utterly unfit to shoot with, jumping off at every explosion of four drams of powder in shot-gun or rifle, and, worst of all, by actual experiment causing the bullet to always go wide of the mark—several inches at 100 yards, the variation increasing or diminishing as the distance became greater or less. My belief is that all glasses which hang diagonally across the eye cause a certain amount of

refraction, which is the case with almost all eye-glasses. Perfect sight can only be obtained by looking perpendicularly through the very axis of the glass. Good spectacles are all arranged according to this fact. "Phila's" glasses may all be badly ground, which would of course cause much aberration of sight. Yet I think the difficulty lies in their not standing squarely across the centre of the eye.

I own a number of rifles, shot-guns and pistols, and shoot them constantly, and from my long thirty-four inch to my short three-inch Derringer, I have found, by repeated contests with others, that there is no variation in the amount of elevation necessary between good ordinary eyesight and my eyes assisted by glasses. I have sighted many rifles for friends, and have repeatedly taken up a gun never in my hands before and shot as well as with my own, showing my sight was not made abnormal by the use of glasses. Pardon me for my intrusion on your valuable space. My only excuse for speaking so much of myself is the hope that it might aid and encourage others afflicted as

OSWEGUE.

Five years ago I accidentally discovered that I had become near-sighted. So gradually had the focal point changed that I was unaware of it until I happened to try the glasses of one of my near-sighted friends, when lo and behold! a brighter world lay before me. Precious to that time, when in the woods, I experienced some difficulty in judging distances, and detected myself squinting continually, as that seemed to clear the vision somewhat. At the ordinary reading distance my eyesight is perfect, apparently, but beyond that a glass about No. 30 is necessary to give me a clear outline of anything.

In shooting with a rifle or gun I always use glasses, but have never experienced the difficulty that "Phila" complains of, viz., shooting over; and, if he will use his glasses whenever he does his rifle, I think with properly adjusted sights he will have no trouble. I have made and used several varieties of fixed rear sights, but the very best one I have ever had I have just purchased from Wm. Lyman, of Middlefield, Conn. The front sight viewed through this, as well as the object aimed at, is rendered perfectly clear.

This sight is one of the many good things with which I have become acquainted through the columns of *FOREST AND STREAM*. As a relief from the cares of business, it is hailed from week to week with delight. Aside from the information that interests all lovers of red and gun, it stimulates a desire for more out-of-door life and sensible recreation. Long may it wave. D. H. S.

Riverport, Conn.

HUNTING RIFLES.

IN your issue of November 4 I read a letter signed "Otto," with reference to the Kennedy magazine rifle, and claiming an undisputed superiority for it in its class as a repeating arm. I have very lately had an opportunity of inspecting a Kennedy rifle and of comparing it with one of the Winchester pattern, but failed to see any advantage in the new arm that is not possessed to an equal extent by its older rival, and am inclined to look upon it as a copy in which the modification of parts is so trifling as hardly to constitute a difference. With the comparatively small powder charge used with both these rifles (small in a sporting sense), I do not fear any chance of one of them on either system bursting at the breech; and should any accident occur from the explosion of a defective cartridge, the results would be more serious in the Kennedy than in the Winchester, as the sliding lock cover in the former is closed when the rifle is fired and the escape of gas is retarded; while in the latter the lock cover remains open, and the gas can escape freely into the air. Were I buying a rifle I would prefer the old well-known arm, whose performances in skilled hands are of world-wide renown. I do not think that the limit of excellence has yet been reached in repeating arms, and as a hunter I would welcome any improvement that would lead to the greater efficiency of the arm. The small charge of powder and consequently low velocity of the projectile is the weak point of the repeater, and I would suggest to the manufacturers to direct their attention to the production of really powerful Express rifles on the repeating principle—arms that would compete with the performances of the English Express rifle, and capable of being safely used with large charges, say 135 grains of powder behind a 300-grain bullet in a bore of .5 inch.

Constructed as the present repeaters are, a charge like the above might be dangerous, as any flaw in the parts of the mechanism sustaining the breech-stopper might cause it to give way and give rise to an accident. The breech stopper itself does not entirely close the barrel, as any one can observe for himself, a ring of the metal of the base of the shell being plainly visible and unsupported, and this in some cases might give way and allow the gas to dash back. To obviate anything of this kind, I would recommend that the metal of the cartridge shell should be encased in that of the barrel, the breech end of which should be recessed to include the flange of the cartridge, while the top of the breech-stopper or bolt should be made mitre-shaped to fit into this recess and effectually seal the end of the bore. An arrangement of this kind would give perfect safety in the event of the bursting a weak cartridge. It remains to be seen to what extent the present breech mechanism will be able to resist the backward strain of a heavy charge, but in every case some arrangement should be added, that in the event of anything giving way, the bolt be kept from being liable to fly back in the fire's face.

To fully secure the advantages of the Express system, such a velocity must be communicated to the bullet that after the penetration of any soft body, it should break up and the component fragments fly forward like a charge of buckshot just after leaving the muzzle of a gun, and convert the parts lying in their path into pulp. I have seen a tiger drop stone dead on being hit by a bullet fired from a Heavy Express rifle, using five drams powder, and on opening the carcass hardly a trace of the metal of the bullet could be found, but the work done inside the animal was terrific. The lungs were pulped into a semi-fluid mass that could be ladled out with a spoon. This was with a soft-skinned animal, and done with a soft metal bullet with large central cavity. Against thick-skinned game the hardness and cavity of the bullet must be modified, the cavity in some cases being entirely suppressed.

I am certain if your rifle makers would turn their attention toward the perfecting of a powerful repeating Express rifle that it would meet with a ready sale in all parts of the world where the sport-loving Anglo-Saxon seeks the excitement and pleasure of the chase. GUNNER.

MILITARY SMALL-ARMS.

BRIE-GEN'L S. V. BENET, Chief of Ordnance, U. S. A., has just made a very interesting report of the doings of his department during the past year to the Secretary of War. In addition to the routine notes of progress he gives very fully his views about the advantages of a really National Guard. Speaking of the Frankford Arsenal ammunition he says:

"It has for some time been my intention to recommend the adoption of a reloading cartridge as an economy, and the trials and experiments conducted with that in view will soon enable me to reach a definite conclusion. The present long-range excitement points to heavy charges and severe recoil, but the experience of other armies and a little reflection convince me that for Army purposes the best average results can be obtained by keeping the charge within moderate limits."

The report shows that there were manufactured at the Springfield Armory during the fiscal year, 20,357 rifles and carbines, and on this subject Gen. Benet says:

"The operations at the armory have been conducted in the admirable and satisfactory manner which always characterizes the performances of every duty by Col. J. G. Benton, commanding. The reputation of the work there done has never stood higher than now, and it can safely rest on the deserved excellence of its arms, known and recognized everywhere."

"On the 1st of July there were in store as a reserve supply, including the above number made, only 22,979, showing that the number on hand at the beginning of the year had been well-nigh exhausted during the twelve months, by issues to the Army and militia, etc. At this rate of manufacture and consumption, the day is far distant when our reserve supply of arms will have reached what all nations consider a proper one."

"At its last session Congress made an appropriation of \$300,000 for small-arms, being an increase of \$50,000 over the appropriation for the year previous, and I indulge the hope that the amount will continue to be increased from year to year until the country is better prepared for any unforeseen exigency."

"The Springfield rifle continues to give very general satisfaction, and the complaints made against it are not greater in number nor more intense than in the case in other armies the world over. I am satisfied that as a single breech-loader it has no superior as a military arm, and that it will not be superseded by anything short of a magazine gun. The latter will unquestionably be adopted, and we will as certainly do so, as not many years ago we adopted the revolver. No magazine gun has yet attained that perfection and completeness that will warrant its general introduction in the army. The Hotchkiss has met with reverses, due to hasty manufacture and imperfect design in some of its minor parts, which can hardly be charged to the invention. It is believed that these defects, in which the mechanical principles of the invention were not involved, have been corrected in the new model, and more favorable results may now be anticipated. The manufacturer's experience with this gun proves that difficulties are ever to be met and overcome in perfecting a new invention that has to stand the severe test of field service. As a rule, a first-rate military arm must be of gradual growth; and be finally made up of successive improvements rendered necessary to correct defects developed in the hands of the soldier. The principle of the Hotchkiss is a good one, but there seems to be some prejudice existing in our service against the bolt system and its awkward handle that time and custom may overcome."

"The calls for magazine guns by our cavalry, the improvements being made in these arms, and the necessity of extending the inquiry in order to get the best, induces me to recommend that an appropriation be made to enable this department to further study and test by trial in the field a few of the best magazine systems."

"An appropriation of \$500,000 for the manufacture of the Springfield gun during the next year is deemed a reasonable one. The strongest and most convincing argument for a continued peace is being thoroughly prepared for war. Our armories and arsenals fully stocked with war material, our fortresses well armed, and our militia well organized, armed, and equipped to march shoulder to shoulder with our small body of regulars, constitute the best peace offering we can present to the world. In the matter of preparation economy during peace means extravagance in war, and, as a financial problem, the wise and timely expenditures of the present will be the true economy."

As an appendix to the report there is an account of a series of trials on the extreme ranges of military small-arms. These trials were conducted by Col. Benton and Capt. J. E. Greer. These trials were undertaken and prosecuted under instructions from the Ordnance office, and the work has been performed with a great degree of thoroughness and completeness. These reports will amply repay careful perusal by those in the Army and out of it who are interested in rifle firing, and much of the data given will be found new and useful. The use of the telephone in determining the time of flight of projectiles, especially at very long ranges, was first made at the Sandy Hook Proving Ground, and its application in these experiments was found most valuable and important.

Among Captain Greer's conclusions are the following:

As a result of these trials it will be seen that the service rifle with service cartridge is simple, suitable to disassemble and possibly to kill up to nearly 3,000 yards; that the same is true of the carbine using the rifle cartridge; that the 500-grain bullet fired from any rifle with a twist sufficient to give the necessary rotation will range nearly 5,700 yards; that variations in weight of powder charge within ordinary limits have no effect on elevation at extreme ranges, velocities approximating to each other; and finally, that with a cartridge prepared as at present, but with an increased weight of ball, the service rifle may be made, if desired, as long a ranging arm as any known.

ANOTHER RANGE SLAUGHTER—*Charlestown, P. E. Island*, Nov. 4.—We are having an inquest to-day over a dead marker, shot in the usual manner by stepping out from the target while the shooting was still in progress, and Jas. J. Heartz was pierced with a bullet. Capt. Longworth who fired the fatal shot tells his version of the manslaughter by stating that "Nov. 3 was set apart for the band's annual shooting match, and as it is attached to the 82d Battalion, myself and Lieut. Daniel Stewart, attended in command. When I went to the range before the match commenced, I found there were no signals. I immediately sent to town for them. When they arrived they were put in the proper places and given to the proper parties, and the match commenced—deceased, acting as marker, received the signals which the marker needs. Everything went on well. When the bandmen had finished shooting at the 500 yards

Under as well as the biggest half of the two-stickers in the fleet. There were Rambler, Alarm and Wauderer among the large ketch schooners; Tidal Wave, Idler, Madeleine and Palmer among the smaller ones. The fleet was headed by the two-sticker, the Peerless, Clio among the second-class centre-board schooners; while in her own class Arrow met Gracie, Vindex, Addie Voorhis and Petrel; the smaller sloops being represented by Active, Wauderer, the little ketches by the two-sticker, the Arrow, and the lower sail breeze from S. W. steady, without much sea, and blowing a few boards through the Narrows, the fleet could lay to for a few days, and then make for the open sea.

At Southwold Spit Arrow had gone to the fore and was making a wake for all hands, with Gracie close aboard, Idler, Palmer, Coming, Vindex and Madeline in the order named. Outward bound, the fleet was headed by the two-sticker, the Arrow, and Addie Voorhis had to cut and run for shelter, Petriess soon following. Madeleine jumped the mainmast head off her. Gracie was making fearful weather of it, and after hammering away at a wall of water, she was obliged to cut and run for shelter, and then hauled down by most and the few who could house topmasts got their snug; for in those days, as he remembered, a honing topmast was a great thing, and a vessel was not considered safe without it. The World chronicler of the times puts in a good word for the Vindex, saying "she did nobly, and was well up with the leaders." Arrow was the third yacht around the lightsail, and in the lane easily the fastest sloop in this country. For a vessel so disproportionate in size to have hung on to a yacht like the Palmer in the Narrows, was a feat that has never since been equalled, and done more in the history of yachting.

SOMC contemporaries are again guilty of half-conscious. The first reports of the Czár's new yacht *Livadia* are replete with childlike flattery, though emanating from interested sources and exhibiting *colour de rose* in unstinted quantity. Upon the strength of one highly cable dispatch our contemporaries are once more "creating a revolution" in naval architecture. The lesson of the *Autark* is not to be forgotten, and the "gains" in their haste to "erect a revolution" before the facts are the same. That revolution has ended in smoke, and the new one met the *Livadia* will fare no better. The "*Popoffka*," which is *Livadia's*, "only a little more so," were tailed with the same delight as they first appeared, but have since proven grotesque failures. The *Popoffka* is a ship, and a ship is not a yacht. It is not possible that they cannot be fast or manageable in rough seas, whatever the reason, so to the contrary. Moored permanently in the Neva, she will supply a grand floating palace, and will under these circumstances obviate the terrible *mal-de-mer* to the imperial gastronomic machinery, but as a seagoing ship she will prove a lamentable failure.

J. D. F., Pittsfield, Mass.—My pointer, three years old, holds his head on one side, shaking it very frequently, and quite often scratches his ear with his foot. Sometimes while doing this it appears to give him pain. His eyes are running more or less, and I sometimes think his hearing is affected. Ans. Your dog has cancer. Exercise care in the matter of diet. Cleanse the ear with tepid water, and then pour in a little weak lead water once a day and hold it there for a minute or two.

L. E. W., Hayt's Corners.—I. We know nothing of the man's race; nor would we make any distinctions if we did. 2. We believe him to be reliable, in the same way that all the established houses who advertise with us are reliable. 3. We know of no pawnbroker to whom we can refer you for second-hand guns, and would advise you to stick to regular gun dealers if you want square treatment. 4. The trouble is not with the revolvers, but with the hand and arm holding them. 5. Patched bullets are not used in Winchester rifles.

C. A. C., New York.—1. I have a very fine double gun, muzzle-loader, 22-bore, 33-inch barrel, 7 lbs. weight, what would be the proper charge of powder and shot for it? 2. Would a 10-bore, breech-loader, 9-lb. gun, be as safe as a 12-bore breech-loader of the same weight? 3. If I have my 10-bore, 12-lb. breech-loader choke-bored will it be as safe as before? Ans. 1. 2½ drams powder and an ounce of shot would be a good charge, though three drams might be used without unpleasant effects, we think. 2. Practically as safe, though of course the barrels of the 10-bore would be a little the thinnest. 3. Yes.

W. M. B., Phila., Pa.—My setter dog, three and a half years old, broke through the ice two years ago and was shortly afterward very bad with the distemper. He was cured of that, but was left

with what was at first a very mild twitching. It has grown on him, and now while at rest or attempting to sleep he becomes quite violent, throwing his legs about, barking with his mouth shut. He is worse when heated, and in warm weather. The trouble seems to be mainly confined to the right side, limbs and all. Ans. Your dog has chorea or St. Vitus dance, a result of distemper. There is little hope of a cure. He may be benefited by giving him ½ grain of nuxvomica, with two grains quinine three times a day for a few weeks.

J. M., Chicago.—My setter pup, nine months old, is troubled with diarrhoea. She is very much emaciated, her coat looks rough, eats sparingly, and her eyes run to some extent and they do not look very bright. I treated her for about ten days with fifteen drops tincture of catechu twice a day, and fed her on such food as boiled milk, beef tea and a few scraps from the table. She seems to be getting better, but is not gaining flesh. Judging from her general appearance when I received her, I concluded she had worms, and I accordingly gave her a small dose of pink root tea, but as she did not pass any I gave up the idea, and now come to you for advice. Ans. As long as the diarrhoea continues, use as an injection by the bowel fifteen drops tincture of opium and fifteen drops tincture of catechu in a teaspoonful of starch water. Also give half a teaspoonful of castor oil in a little warm milk twice a day.

S. F., Hollidaysburgh, Pa.—While out hunting recently I shot and wounded a rabbit. Knowing that the same could not go a great distance I sent my setter dog after him to retrieve him. Waiting about five minutes, and the dog not coming back, I started in the direction whence I supposed the rabbit had gone and, coming to a fence, I saw my dog standing half way up in a field grown partly over with weeds, having the rabbit in his mouth. Calling on my dog to fetch he still stood there, not making any motion to come in.

Thinking something was wrong I started to investigate and, coming near the dog, I found that he was pointing some game. Walking up to him I found a covey of quail which he had pointed, all the time with the rabbit in his mouth. Have you ever heard of a setter or a pointer dog doing the same? Ans. Yes. We have seen several dogs point with rabbits in their mouths. We, however, are opposed to allowing either setters or pointers to retrieve or even point fur.

SEBASTIAN, Columbus, O.—I have a Newfoundland dog which has been lately suffering from a peculiar trouble with his ear. I noticed one morning that one of his ears was badly swollen. I took him to a physician, who lanced his ear, taking from it quite a lot of blood. This operation was repeated three times in four days. At the second operation about half a goblet of blood, somewhat clotted, was drawn. To-day I had his ear lanced again, and a wooden clamp, made of two sticks tied together, fixed at the ear to stop the flow of blood from the arteries. I am anxiously awaiting the result of this. In case the ear fills again (it usually swells to about the thickness of an inch or more) what shall I do? Some fear attends it, and a general feeling of sickness and torpor comes over the dog. He is very large, usually very active. Age, five years in February. Ans. There is probably an aneurism of the ear lobe. Pressure after evacuation should be used, and probably an injection of some astringent—as per-sulphate of iron—into the cavity.

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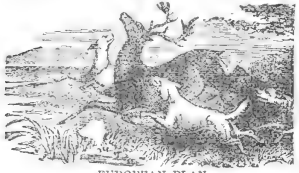
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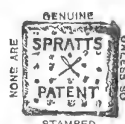
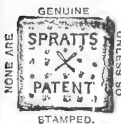
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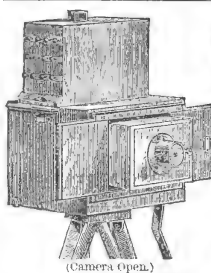
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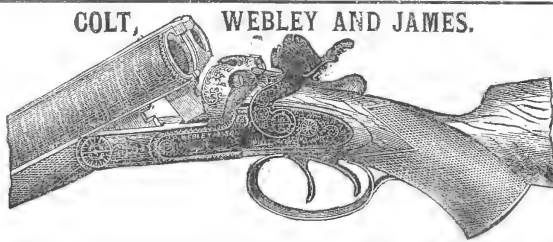
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NEW YORK, THURSDAY, NOVEMBER 25, 1880.

Vol. 15—No. 17.
{Nos. 39 and 40 Park Row, New York.

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FOREST AND STREAM.

NEW YORK, THURSDAY, NOVEMBER 25, 1880.

This is an excellent time to call the attention of your friends to the merits of the FOREST AND STREAM. We shall be happy to supply specimen copies of the paper to any addresses which may be sent us for that purpose.

WE wish to press this week on Tuesday, instead of Wednesday as usual, and many communications which would otherwise have appeared in this number are necessarily deferred a week.

PITHING FISH.—While on a fishing excursion recently we brought in a string of black bass which looked so nice and fresh that all at the country hotel where we stopped thought they must all have been caught on the last day, for they knew we had been in camp three days. When told the fish were "pithed" as soon as caught they seemed no wiser than before, and so it occurred to us that many other readers of FOREST AND STREAM may not know the word. Take down your "unabridged" and you will find that pithing is the act of severing the spinal marrow, usually next the head, and it probably is so called because it cuts the pith, or marrow.

The operation renders a fish, or any other animal, senseless immediately, bleeds them somewhat and keeps them from bruising themselves while dying in the ordinary manner by asphyxia, or drowning in the air, whereby the gills become dry and the blood clots. All fish should be either bled in the gills or pithed as soon as caught: they look better, keep better and do not suffer.

BACK FROM THE SOUTH.—Mr. S. T. Hammond, whose departure for the South we announced in our issue of October 23, has returned with all his dogs except Thistle. She whelped about ten days since and was left for the present in Virginia. Mr. Hammond has been in Virginia and Maryland and reports his dogs fairly plenty. He is well pleased with the way in which all the dogs acquitted themselves, although the time that he has had them is but short to fit them for the trials. We shall expect to see them at Robins' Island next week.

A PROPOSITION TO GENTLEMEN SPORTSMEN.

EAST ROCKAWAY, QUEENS COUNTY, L. I.

Editor Forest and Stream:
I noticed in last week's edition of your paper a communication with editorial comments on the trapping of game on Long Island. The idea of your correspondent and your comments are but in consonance with the encroachments which are constantly being made upon the liberties of the people by the wealthier classes. The law forbidding the trapping of game on Long Island is, or ought to be, unconstitutional. The farmer, upon whose land the game is found, and upon whose crops it has lived, is virtually the owner of it, and if his children would to trap it there is no equitable objection to their doing so. By what right does that unmitigated nuisance—the "real sportsman" (?)—trespass upon our land, throw down our fences, wound our cattle and kill game which we have grown, which has fattened upon our crops? The law and the complaints of your correspondent have induced the farmers in this vicinity to club together and put up the required legal notice forbidding all trespassing, and if your correspondent or any other "real sportsman" (?) is caught shooting in this vicinity, he will have a bill of damages and costs to pay. We have determined that, if our boys cannot trap our own game, anti-localize (?) trespassers shall not shoot it, and wee unto any man who disregards our notice.

I. H. GRIFFITH.

THE letter which we have placed at the head of this column is certainly frank and outspoken. The writer does not mince matters. He claims to be a farmer and to represent the feelings of his fellow farmers of East Rockaway. We know that the views expressed are those held by other land owners on Long Island, in other parts of the State, and in other States of the Union.

It is most important in this discussion of the game laws which refer to the game on landed estates, that we should have a clear appreciation of how such laws are regarded by a class who are so directly interested—namely, the farmers. We believe that Mr. Griffith's letter fairly expresses the attitude of thousands of farmers toward the gunners who shoot over their lands. It therefore deserves fair and candid consideration. This we are prepared to give it.

We do not propose to waste our time by attempting to prove to Mr. Griffith, and to those who share his opinions, that the game which he claims to be his belongs to the State, that the State has then the right to prescribe the conditions of its capture, and that the law against trapping therefore ought to be, and is, constitutional: nor shall we attempt to explain to him the exterminating effects of the practice of snaring game birds. All this being proven even to their own satisfaction would not, we opine, change the attitude toward sportsmen now maintained by many farmers, nor would the end sought, which is the due protection of game, for all our logic, be any nearer of attainment. Indeed, for the time being, we are willing to grant to the farmer all that he claims in this matter: accede to his proposition that the birds on his land belong to him: and even acknowledge that he may do with them as he pleases. For we shall try to show to him a wiser disposition than that of smuggling them with broken necks to the baggage-master and marketman.

It happened that this letter came to us only after that part of the present article, which follows this paragraph, was written for to-day's issue of FOREST AND STREAM. It is an admirable indorsement of what we had written. A further consideration of it must be deferred to a future number, when, in accordance with our previously determined plan, we shall address the farmers directly upon this subject. Our proposition now is to gentlemen sportsmen.

The provision against snaring and trapping game birds is eminently wise and proper, but outside of certain restricted territories which are leased and protected by game societies the law is practically a dead letter: so much so that the traffic in trapped birds is conducted without concealment, and game dealers in New York openly advertise for trapped birds and openly sell them.

The law is not respected by the farmers, who have it entirely within their power, if they will, to prevent the setting of snares and traps on their lands.

They do not regard the law because it is not to their interest to do so. Public opinion in farming communities does not sanction the law. Its enforcement is regarded by land owners as an infringement of their rights and of the rights of their children.

The only way by which this law can be made anything

more than a dead letter is by enlisting the interest of the farmer in securing protection for the birds. The policy to be pursued is that which has been repeatedly indicated in this journal. We cannot better outline it than by reproducing here what we have said before, and we accordingly repeat from the FOREST AND STREAM of March 11, 1880:—

"Omitting at present the discussion and even the mention of all other means, there is one precaution and protection, which of itself alone would suffice abundantly to enforce thoroughly all the game laws, and in fact go far beyond the scope of the laws—namely, such a uniform system and policy on the part of all sportsmen as will give all the landowners a warm and steady interest in raising and sheltering and defending all the broods of young birds on their farms. If all the farmers on the Island were one and warily one in this matter the work would be done up thoroughly, for they are lords of the land.

"In very many instances, as matters now stand, farmers and gunners are not friends in these matters, and have no interest to befriended each other. Without going closely into particulars—which in fact is not necessary—the fact is that there are gunners who are brutes and wild beasts when their gunning fever is at the height, and who, like so many Malays running a-muck, will recklessly trample down crops in a ten-mile walk, damage and exasperate the farmers all the way; perhaps if accosted, and that in a proper way, insulting or damning the farmer: or, to the disquiet or alarm of his wife and daughters, shooting into his doves, possibly while the doves are near the house or on the home lot or on the barn roof. Such gunners come out from the cities every year and are a disgrace, and worse yet, a great injury to all the real gentlemen who like now and then to handle a gun in the right way and time. One is an offender and the next ten are blamed and hated on account of this one.

"Let all the farmers and their sons and hired men find that it pays them to protect birds and they will do it and satisfy all parties. The gunners are willing to pay for their sport more than the pittance of ten cents a quail, which a shy and stingy baggage-master hands out secretly to the trapper. The dime is a bigger coin to the hard-handed farmers boy, scantied of spending money, than a quarter is to many a sportsman. Let all parties understand each other and the birds will be left undisturbed and will be carefully protected till the honorable gunners come for the sport at the appointed time and pay for the sport that is then and thus guaranteed them on good grounds, something as in the old country, but in the right way for American citizens. The practical details ought not to be at all difficult to arrange in most parts of the Island, nor in other sections of the country. But if some farmers are dogs in the manger—do not shoot nor let others shoot on their farms—all the better, for there will be safe harbors, secure game preserves, where the birds will come up to full strength, and from which they will take wing, to be shot elsewhere or to procreate another generation.

"If the gunner would always pay for the birds he shoots, and if he shoots only what can be properly used, the farmers of the Island and the State and the Union in a vast majority of cases would welcome such gentlemanly gunners and perhaps be proud to rank among them as warm friends of fair and lawful sport.

"These two points, upon which we cannot too strongly insist, are of vital interest to many thousands of men whose interests in the matter are really identical in the long run, if only regarded in the proper light. But if the farmers are expected to protect and support and favor quail and meadow larks in order to let mischievous or butchering gunners kill ninety-five out of every hundred, without thanks or pay, and perhaps with serious damage to crops, temper and comfort, the sport is rather too one-sided. Rather let mutual arrangements be made to equalize it and to harmonize it all round."

Only by adopting such a policy as we have outlined can gentlemen sportsmen hope to preserve from extermination the game of Long Island and of other sections of the country. We commend to game societies and to individuals a consideration of this view of the case.

THE FOREST AND STREAM does not stop with a reiteration of the general recommendations here given. It is prepared to go further, and for the benefit of its readers attempt to put this into actual practice by arranging the details and

bringing into direct communication with each other, the gentleman sportsman who is willing to make a suitable return for services rendered, and the farmer who is willing in consideration of fair treatment to preserve the birds on his land.

We propose the fair trial of a carefully matured scheme, of which the general purposes are:

1. The protection of game birds by farmer and landowner for the benefit of the gentleman sportsman.
2. A fair remuneration of the farmer by the sportsman for privileges granted.
3. Putting the two interested parties into direct communication with each other.
4. A discrimination between gentlemen and rowdies, and the protection of the farmer and the gentleman sportsman alike from the direct and indirect injury of lawless gunners.
5. The uncompromising enforcement of the law against netting and snaring—not in the interest of the sportsman as against that of the farmer; but for the mutual benefit of both.
6. The united efforts of farmers and sportsmen to duly protect and replenish the supply of game.

To put into tangible shape such a scheme as this, we must at the outset receive the endorsement and co-operation of the sportsmen who are interested. If we have not mistaken, we shall receive this; and without further preliminaries, we now call upon such of our readers as approve of the plan, and are willing to join us in it, to send their names and addresses to this office. We invite correspondence on the subject.

THE DEATH TRAP IN SHINNECOCK BAY.

SINCE the publication of our article with the above heading, which was taken up and commented upon by the *New York Times* and *Brooklyn Eagle*, we have had several letters and interviews upon the subject. A lawyer writes us that he finds that no law appointing commissioners to locate an inlet for the bay was passed by the last Legislature, and thinks that this may be an error.

We have not looked into this portion of the affair, having received our information from the fishermen about Quogue, Atholville, and Good Ground. The facts about the closing of the inlet and the certainty of the death of the fish, if not released, all agree upon. During the past week many young bluefish (snapping mackerel) have come to New York market from the bay, fish of half a pound; and if they serve for food it is better than to have them entirely lost. The bluefish left this part of the coast (Long Island) fully three weeks ago; and the millions of young of this species, as well as those of the menhaden, weakfish, etc., should be allowed to go and return with increased growth next season to say nothing of the injury of the bay for spawning purposes by allowing the fish to die there.

Mr. H. D. Butler, well known as the Superintendent of the New York Aquarium under the old regime, has been at Good Ground all summer. He tells us that the location of an inlet has been decided upon, but that it will not be dug until the people have finished their fall farming work, perhaps in January! This is surely covering the well after the calf is drowned. The bluefish, weakfish and menhaden will then have died, and their carcasses, such as are not devoured by the crabs and eels, will lie until the warmth of spring causes them to decay, when the scum on the top of the foul water will repel every fish seeking to enter to deposit its eggs. The closing of the inlet has resulted in a rise of the waters of the bay from the inflowing creeks until it is between one and two feet higher than usual, and the cellars in the vicinity are flooded. The only outlet is the filter through the sands of the beach. Mr. Butler stood upon a temporary foot-bridge, made necessary by the rise of the waters, and counted thirty-five dead bluefish in the little creek. They had chilled and died.

The fishermen say that in former years while the bay was closed they got carloads of large striped bass which, becoming chilled, floated up to the surface. Weakfish of eight to ten pounds are readily caught by dipping up in a net, they being too cold to escape. These fish cannot stand the cold weather that some of our fish which remain all winter with us do. The different fishes are similar to the birds—some are hardy and will endure cold and others will not. While men are disputing over the location of an inlet, it is well to bear in mind these facts as gained from those long familiar with the bay. Seventy years ago the inlet was away east of where the lighthouse now stands. The one opened last season was two and-a-half miles west of it. All the inlets on the south side of Long Island are working west. The great inlet at Fire Island does not cross the beach at a right angle, but runs from the bay in a westerly direction, and perhaps this might prove of advantage to Shinnecock.

This is a question which does not alone concern the men who live around and from the bay. It has a wider application. It affects the food supply of a great city, and while our Fish Commissioners are giving their time and energies to the stocking of the waters, and the people are willing to furnish the means to do it with, here are untold numbers of fish dying just as they have arrived at the age when they are fit to go to sea to grow. We would like to see our State Fish Commissioners empowered to meet cases like this; they are the ones who should have entire charge of it, and they would arrange the inlet where it would promise the greatest

permanency without regard to any man's front door. They should have a distinct appropriation to meet such a great emergency as this, and we know they would not wait until January to do it.

Forest and Stream Bird Notes.

AN INDEX AND SUMMARY OF ALL THE

ORNITHOLOGICAL MATTER IN FOREST AND STREAM.
VOLS. I—XII.

COMPILED BY H. B. BAILEY.

THIS volume, as its title imports, is a complete and comprehensive summary of all the ornithological matter contained in the first twelve volumes of the *FOREST AND STREAM*. The material here condensed comprises extended essays and descriptions, field notes and observations by sportsmen and naturalists. They include every part of North America; embrace a period of six years; and relate to the life history, haunts and habits of all the familiar birds of our seashores, fields and forests.

Much of this material has been written by well-known ornithologists, who have from the inception of the *FOREST AND STREAM* recognized its value as a medium for the interchange of information of this character. In addition to having secured the contributions of so many writers of accredited authority, the paper has been remarkably successful in stimulating original study and observation on the part of its readers, and the good result has been the acquisition of a vast fund of new and useful information pertaining especially to the game birds of North America. The great bulk of the book indeed has been furnished by sportsmen; it embodies their own personal observation, and is what has interested them. It is, therefore, what cannot fail to interest all sportsmen.

The labor of compilation, which has occupied the leisure time of several months, was undertaken at the earnest and repeated solicitation of numerous readers of the paper, who were cognizant of the wealth of ornithological material stored away in its files, and who felt the need of having the same in compact and accessible shape. The book as completed fully justifies their opinion; it contains more useful information about the game birds of this country than can be found in any other single volume published.

The plan followed in the preparation of the *FOREST AND STREAM BIRD NOTES* has been to make (1st) an alphabetical index, all the articles relating to a given subject being designated, with references to volume, number and page; (2d) an abstract of each article, and so a complete abstract of all the matter contained in the twelve volumes relating to each separate subject; and (3d) a complete list of the writers.

The book will be of equal value to those who do, and to those who do not, possess complete files of the paper. Under each head, as Quail, Ruffed Grouse, Snipe, Wild Turkey, Woodcock, etc., will be found a digest of all the contributions concerning each of these birds, the localities where they are found and the seasons, the migrations of the migratory species, and their breeding and other habits.

The book is now in the printer's hands. It will be printed on fine calendered paper, with wide margins, and will make a volume of about 200 closely printed pages. The date of publication and the price will be announced in due time.

DEFIANCE OF LAW IN NEW YORK.

THE law of the State of New York prohibiting the sale of striped bass (rock-fish) under half a pound in weight has been generally observed by the market dealers of this city, until recently. The fact is that striped bass weighing less than one-half pound are now sold in the New York markets six days out of the seven of every week. It was supposed by the dealers that those who were instrumental in procuring the passage of the law would be on the lookout for its violation and enforcement. This is not the case, nor is it to be expected. Men may advocate the passage of a law and then their duty ends. Neither is it our duty to make complaints to the courts, as we consider that we fulfill it when we publicly call attention to a violation of the law.

The fact is that New York City needs a Game Protector, and Long Island needs another—men who reside on the premises and can watch the markets. These markets, as we have before said, are the great incentive to poachers, and if the sale of their plunder is stopped they cannot follow their unlawful business.

There is entirely too lax a state of public opinion in regard to the violation of the game laws, many people looking at them as a venial offence; but it is robbery; robbery of the whole people, which, if practiced upon an individual, would be dealt with severely. These laws are made, or should be made, to give every man a fair start in the race for sport, and he who starts in a few days, or weeks, in advance is a robber, whom it is base flattery to call simply a violator of the law.

The striped bass law was enacted to save a valuable fish from extermination by the killing off the young—and surely half a pound is small enough limit for a fish which often is seen in the market of thirty pounds, and sometimes of double that weight.

The poachers are now in arms to resist the law. Our authority for this is the *Oswego Palladium*, which says:

Two weeks ago William P. Dodge, of Prospect, a State game con-

stable appointed under the act of last winter, made a tour of Oneida Lake and destroyed about thirty trap nets which he found set in violation of the gamelaw. He used some boats from Messenger's hotel livery. That night, it is reported, the fishermen, learning of their losses, gathered at the hotel, armed themselves with axes and destroyed all the boats, to the value of about \$400. They have reset their nets, and every night from ten to fifteen fishermen, armed with guns, patrol the beach all along the fishing grounds. They keep a man stationed at Canastota to send out the alarm if any State constable or any other officer starts out for the lake. The fishermen openly declare that they will kill the next game officer who appears. They are lawless in their habits, and it is not doubted that they will fulfill their threats. One man has thirty of these trap nets, worth \$40 apiece. If the enforcement of the law is insisted on, it is believed that there will be trouble, and at the same time it looks cowardly for the Oneida County Game Association, which started the movement, to back out.

If what this report says is true, then no language is too strong to use in this matter. We hope to learn that the Oneida Game Association has not backed down, but that they will support Mr. Dodge in his laudible undertaking. If not, then we trust that Mr. Dodge has the requisite backbone to call on the State for aid. We have great hopes of the efficiency of the new Game Protectors. The only fault is that there are not enough of them to watch the great markets and Long Island, the home of the poacher, and we will give them our unqualified support in all their lawful undertakings.

There is no use in mincing matters when poachers are as daring and defiant as these Oneida Lake robbers are. They must be put down at all hazards.

Since the above was penned the *Rochester Democrat and Chronicle* came to hand with an account of an attempted assassination of Mr. G. M. Schwartz, the Game Protector of that city. After recounting a splendid raid by Mr. Schwartz on the illegal netters of Cayuga and Seneca Lakes, whereby over 100 gill nets and many fine lake trout were confiscated, it says:

As they reached Two Mile Point several men were seen in boats laying their nets, but upon the approach of the steamer they pulled hastily to the shore and ran away. Their nets—five in number, each loaded down with magnificent salmon trout—were confiscated by the officials, and the steamer resumed its course. It was a bright moonlight night, and Mr. Schwartz and Mr. White were standing on the deck engaged in conversation, when the report of a gun was heard on the shore, and a bullet entered the post against which Mr. Schwartz was leaning, within two inches of his head. The lead knocked off a splinter of wood, which struck the gentleman over the eye, but beyond this he was not injured, although the call was exceedingly close. For the remainder of the trip Mr. Schwartz stood guard with a gun in his hands, while Mr. White pulled out the nets, and before they reached Hammondsport they had seized twelve nets and torn up between thirty and forty.

Mr. Saunders, superintendent of the Cayuga steamboat line, offers a reward for the discovery of the man who fired the shot and every effort is being made for his apprehension. It was certainly a dastardly attempt at murder, and shows plainly the character of the men who are engaged in illegal fishing and the means to which they will resort to resist the officers of the law. Mr. Schwartz has done and is doing splendid work in protecting our fishing interests, and he should receive a substantial support.

FISH EGGS FOR FREE DISTRIBUTION.

PROFESSOR BAIRD, United States Commissioner of Fish and Fisheries, will have eggs of salmon, land-locked salmon, whitefish and California trout for public distribution during the months of December and January.

The salmon eggs are those of the Atlantic salmon (*Salmo salar*), from the Penobscot River, and will be sent from Bucksport, Me. The land-locked salmon eggs (*S. Sebago*) will be delivered at Grand Lake Stream, Me., the eggs of the whitefish (*Oregonus albus*) at Northville, Mich., and the trout from the United States salmon-breeding ranch on the McCloud River, California.

Now is time for all fish commissioners or fish culturists to make application for the eggs of such species as they may require to Prof. Baird, Washington, D. C. There will be no charge for the eggs, nor for their packing, the only cost to the receiver being the express charges on the packages from their point of shipment.

DR. GARLICK ON THE CARP.—The venerable fish culturist, Dr. Theodorus Garlick, now in his seventy-sixth year, has begun the culture of the carp. The Doctor, as some of our latest readers may not know, is the father of fish culture in America and is an invalid of sixteen years' standing, now confined to his house. He writes to us as follows from Bedford, O., Nov. 13: "I received a very nice note from Prof. Baird a few days ago. He also sent me some German carp and I have placed them in as good a place as can be found most anywhere. Prof. Baird is doing more good for our big human family than any other man living."

STATE ASSOCIATION PRIZES.—Last week we published the names of the prize committee. We are informed that many prizes of a most substantial character have been already promised and that the full list, when completed, promises to be exceptionally full and valuable.

A WORD TO OUR READERS.—Every reader of the *FOREST AND STREAM* is requested to send us the names and addresses of such of his friends as are interested in field sports, but are not among our subscribers.

The Sportsman Tourist.

CHILCAT AND CHILCOOT.

STEAMER FAVORITE, PORTAGE BAY,
CHILCOOT ISLET, Chatham Straits, Alaska,
August 24, 1880.

I DON'T feel at all sure that the above long and apparent-
ly comprehensive heading will give you or your readers
a very clear idea as to "Pisco's" whereabouts; so I will
explain a little more in detail where I am, and for the benefit
of such of your readers with adventurous turn of mind,
fondness for travel, and who may be bothered every summer
with the great question "Where shall I go?" will tell you
how and why I got here and what I am doing—the latter
first, as it is the shortest story. I am simply waiting, with
such patience as I can muster up, the getting sober process—
now I hope in operation upon a number of Indian chiefs
with whom to-morrow I am to hold converse on affairs of
importance; of so great importance, in fact, that there are
at this present moment, within thirty miles of this place, at
least three thousand Indians, who are more or less advanced
in the different stages of intoxication which are incidental to
a *potlach*, which *potlach* is the commencement ceremony of
a war which has been declared between the Chilcat and Chil-
coot Indians.

A self-constituted commission, consisting of Major Wm.
Gouverneur Morris and myself, which is irreverently termed
by the Shumans and hydrographer who accompany it the
"Hyas Joint," has been cruising around the islands of
the Alexander Archipelago, the icebergs of Cross Sound
and Icy Straits, the "glorious" glaciers (I got that adjective
from Prof. Muir himself) of Chatham Straits and Lynn
Canal, and the dangerous rapids and reefs which character-
ize Peril Straits, visiting the most powerful of the Oranase
or coast tribes, and settling up many troubles and little dis-
putes which have sprung up since the white men have begun
to penetrate the country.

Our trip is being made in a trim and very comfortable little
steamer, the Favorite, which is owned by a company of en-
terprising men, who have determined, Elliott to the contrary
notwithstanding, that the resources of Alaska are well worth
developing, and who, having organized themselves as the
"Northwest Trading Company," are following as far as
they go, and reaching out beyond, when they fall short, the
footsteps of the Hudson's Bay Company, which for years
controlled the trade of southeast Alaska.

The company has established and is establishing trading
posts at numerous desirable locations, where, comfortably en-
cased in a neat frame house and store combined, their agent
employs his time in trading with the Indians his stock of
cloths, buttons, shoes, hats, beads, blankets, combs, in short
nearly all and every article down to bogus meerschaums and
cheap umbrellas usually to be found in a country store, re-
ceiving in return the skins of sea-otter, fur and hair seals, sea
lions, heavier, mink, marten, land otter, bears, wolverines,
lynx and others, and the oil of whales, porpoises, and seals
and between intervals of private business, some of the less use-
less hours by learning Chinook from a Cootchman.

The Favorite is the connecting link between their agents
and the outside world (in which dignified position Sitka
stands to them), and, making a monthly trip, distributes and
collects.

Upon this trip the interests of trade were sacrificed, and
the coach-whip which floated from her main gave indications
—which were confirmed when the howitzer gave forth its peal
and the galling, rattling, which was going on at the Chilcoot
—that the "fire canoe" was upon a more important mission;
and at each village we visited there was a hurried discarding
of blankets and scrubbing up and arrangement in gorgeous,
although often incongruous costumes, by the Liwasi Tyhees,
preparatory to their *war-own* with the "Hyas Cletche J. C."

Yesterday we reached this place, and here only the post
traders greeted us, and a few women remained to welcome
and see us salmon berries. All the men and boys had gone
to the great *potlach*, which was going on at the Chilcoot
village, some twenty miles away, and at Chilcat also (do be
careful of the last syllables of *Chilcat* and *Chilcoot*, otherwise
my letter will be badly mixed) a *potlach* was taking place,
which was enlivened by a little fighting, in which already
some blood had been shed, one life lost, and much more
of the same to be expected.

I'll try to give you a clearer (I won't say clear) idea of the
situation. The Chilcats and Coots occupy each large village,
where about thirty miles distant from each other, situated
where the rivers, one of which, the Chilcat, flowing south-
ward, and the other south-west, converge to the head of a nar-
row peninsula which divides the upper end of Chatham
Straits into two bays. There is a trail and portage across
this peninsula, and at the lower Chilcat village on the west
side, and at Portage Bay on the east, the two tribes meet to
trade or get drunk when in harmony. At Portage Bay the
Post Agent is in the confidence of the two.

Nearly all the most powerful and warlike of all the
Alaska Indians, and have always been opposed to the
coming amongst them of white men, principally because they
feared an interference with a right which they have always
claimed and maintained to the trade with the interior In-
dians, the Sticks, and also because, as their chief, Klotz-Klotz,
said, "The white men demoralize the Indians by selling or
giving them liquor and debauching the women," which, I re-
gret to say, is only too true.

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gret to say, is only too true.

a Chilcat and the ear-breaking defunct a Chilcoot, hence this
row, which blood or blankets alone can settle, and both par-
ties are getting up Dutch courage for the fight.

Our only hope is that the messages we sent to both sides
on our arrival yesterday will meet with respect, and that
they will, as we request, establish a truce, get sober and
come to talk the matter over with us. If they do I have full
faith that we will be able to stop the war, but until they do
come, or send us word that they refuse, we are reduced to
the monotony of expectancy, which is the more trying inas-
much as within easy distance there is a grand glacier, whose
terminal moraine is accessible, that we would like to visit,
a marsh and that where wild geese and ducks congregate, and
a stream where *Salmo spectabilis* are abundant, all of which
are to us now out of reach, for it would never do to let these
Tyhees, if they do come, catch us in the dishabille incident
to glacier exploring, shooting or fishing trips. I would be
sure to sacrifice prestige, while gaining comfort, by the sub-
stitution of slouch hats, flannel shirts and rubber boots for
brass buttons, cocked hats and gold lace.

The Major and I have, however, our resources—he up to
his elbow in papers which are in course of embodiment in his
forthcoming report, and I my note-book, which is crowded
with items, among which those for Pisco's Forest and
Stream friends are badly mixed with others of dry statistics
and other matter better adapted for official papers.

I will while waiting employ profitably a portion of the weary
hours in getting into shape some of the former, which in due
time I will transmit to you as "The Log of the Favorite." I
trust that in so doing I may be able to interest first of all
myself, for it is hard for me now to withdraw my mind from
the contemplation of the alternative which is facing me. If
my message to the Chilcat and Chilcoot chiefs is received
with respect, and I find that I have not over-rated my influ-
ence with the Indians, and if they do get sober, do declare a
truce and do come to see me at Portage Bay, and when the com-
mon sense of my counsel and do re-establish peace, I shall
have rendered a great service to them and to such whites as
are now prospecting the country far beyond protection, and
the results of this trip will be of more value to the future
of Alaska than any which I have been enabled to accom-
plish.

But, on the other hand, if I have overrated and they won't
come, and send me instead a message to clear out; or, if
coming, they refuse my intervention, the prestige I have es-
tablished will be ruined and my usefulness in this country at
an end.

I have a great deal depending upon the next few hours.
When they are passed and I shall know the result I shall
either finish this letter or commit it to the wastepaper
basket.

PYRAMID HARBOR, AUG. 25, P. M.

That you get this letter may be a sign and token to you
that success has crowned our efforts. I gave in yesterday
afternoon, too restless to continue my stumping up, and in
spite of my prudent resolution, down my shooting habiliments
and started across the trail for a peep at a little lake
where the evening before the Major had seen signs that con-
vinced him that when the time was right ducks must flock
to it.

About half way over I met in single file, first Pierre Eras-
mus, who with his handsome six feet of figure arrayed in
red shirt legs and well-revered, wore a large and a
capital rap in Fra Diavolo, and behind him five Indians,
the foremost of whom I at once recognized by descriptions I
had had as Klotz-Klotz, the chief of the Chilcats, a tall, well-
built, dignified old fellow, from whose good looks, however,
a wad of cotton, stuffed into a hole in his left cheek, somewhat
detracted. From this hole, caused by a gunshot wound, one of
his soubriquets, "Hole-in-the-Cheek," has been derived. With
him was another veteran, almost equally powerful with him-
self and much older, Klotz being about sixty and Kak na ty
about seventy or more. Both welcomed me most heartily,
for in spite of my decidedly unimpeachable rig, Erasmus, with
true shrewdness and French politeness combined, drew him-
self stiffly up as we neared each other, and making to me the
most profound obeisance omitted to offer me his hand, thus
paying tribute to my greatness, which was his trump card
with the Indians, and most gracefully and solemnly introduced me.

The costume of Klotz and Kak were not so gorgeous as to add
to my discomfort, as both they and their attendants were
arrayed in blankets and leggings; but in a big box carried by
the latter was the wardrobe, in which he had expiated a
astonish and impress me.

The retainers were in war paint, with cotton or down on
their heads, which indicated determination.

Thus stripped of all external show of power, the old chief and
I sat down under a great cedar tree and discussed the situation.
I think that this meeting was a fortunate one for the Indians.
We cleared up a breast-laden, the first use of both of which
I at once ascertained; and the influence of a large meerschaum
pipe, which some months ago I sent him as a present, had its
weight.

After all, if the true history of wars and diplomacy could
be written, how many times such little matters have had
more weight than elaborate speeches, convincing only their
utterer.

Free from disturbing influences, Klotz-Klotz unbosomed
himself, and during that interview he admitted to me that his
family was in the wrong, and that he would willingly assist
in establishing peace. He claimed that the killed Chilcoot
was not worth a hundred blankets, but that he would pay
two hundred if no less would heal the breach.

The post trader made Klotz & Co. comfortable for the
night, and this morning about ten o'clock several large can-
oes, with flags flying, drums (Indian drums) beating, and
propelled by about a dozen paddled paddlers, each came
around the point of the harbor, and were shot at by the In-
dians. In the foremost was Danawah, the Chief of the lower
village, and a blind old Shaman, who is Chief of the Chil-
coots.

They were directed to go ashore to the post trader's, to
wait until the firing of a gun announced the readiness of the
Tyhees to receive them. They refused to go to the trader's,
because the Chilcats, their enemies, were there, but instead
paddled in to the mouth of a creek, where on the beach they
prepared and ate their meal and dogged their paw-wow-ga-
ments. At 11 the sharp bark of the howitzer summoned
them to the meeting, and both parties came alongside on
different sides of the boat, and avoiding all intercourse with
each other.

When duly seated in the cabin they presented a not undig-
nified appearance. All wore good American clothes, of which
the coats were ornamented with more or less insignia of various
ranks of American and English officers of both army and
navy, white shirts and shoes and stockings.

On our side of the table, epaulets and full dress undoubt-
edly produced good effect.

The interview lasted two hours, and during it the whole dif-
ficulty was adjusted, and when we left the stifling atmosphere
of the cabin—for Indians even of high rank are odorous—for
the upper deck we were a party of friends all under pledges
for mutual benefit.

Mine to them was, in answer to the request of both parties,
"Yes; I will do my utmost to assist you in this matter,"
which matter was this. "When you go to your country please
tell them to send teachers to us as well as to the Sticks, so
that our children may not grow up stupid like their
fathers." (The Sticks are the Indians at Wrangel, where the
Presbyterians have established a mission school which is
doing much good.) I believe that they will keep their prom-
ises to treat well all white men, and to their country, and
I know I will mine, and through you I now ask of any Chris-
tians you may have among your readers—and I doubt not that
such there are—to send to the Rev. G. Lyon, Missionary at Sit-
ka, such articles as will be useful to the school which Mrs. Dick-
son, the wife of the post trader, has started on her own hook, and
at which half a hundred children are being taught, and which
is soon to be transferred to a neat frame building, which, designed
for a store at Taku, has been, by Capt. Vanderbilt, given to
the Indians at Portage Bay, and on each side of which build-
ing the Chilcats and Chilcoots, now reunited, promise to
build villages so that their children may attend the schools.

The Indians were entertained by a few shots fired from the
howitzer, and more by several volleys from the gulating which
was mounted aft, and which was made to sweep an arc of 180
deg., at good canoe distance.

Then they paddled ashore in company, lit a camp fire, and
began a friendly *potlach* on the beach, and we, satisfied
with the day's work, started at 3 P. M. for home, as we have
learned to consider Sitka, and we have anchored in a snug
harbor for the night, during which I hope to make up in
sleep for last night of wakefulness and unrest.

All's well that ends well. PISCO.

ROUGH NOTES FROM THE WOODS.

FIFTH PAPER.

OUTLET OF FOURTH LAKE, BROWN'S TRACT—AND JONES'
CAMP ON THE SILLWATER—GOING IN AND COMING
OUT—SOME REMARKS ON THE PRESENT STATUS OF THE
NORTHWOODS WILDERNESS—THE "ANGLO HORSE"—THE
CHILCATS' "TODDY"—WHAT HE CATCHES—WHAT HE
KILLS, AND HOW HE DOES IT.

IT is the 2d of September, as sitting in my shanty at the
foot of Fourth Lake, I lazily scribble a few notes of a
two months' paddle in these Northern waters. I have perhaps
paddled too much. My unquenchable love for fresh water
seas—large or small—has kept me from prospecting the for-
est as much as in all honesty I ought to have done.

But the Woodcock was such a duck; it was so delightful
to drift about the cool, clear lakes, by day or night in her.
The weather during the heated term was so perfect, and the
woods from side to side, and from end to end, are so fearfully
heavy to a footman that I came to spend much of my waking
hours at the paddle. More times than I can tell I filled her with
the coarse soft brakes, (fern, botanically) piling them a little
more at each end of the canoe than in the middle, then lying
down in the easiest position I could get, let myself drift—just
where it pleased winds and waves to send me.

The easy, gentle rocking of the canoe was the best incen-
tive to drowsiness I ever found, and by night or day, was
nearly certain to send me into dreamland. A score of times
I have gone to sleep drifting on deep, wide water, to be
awakened by the pressing of the paddle against the gunwale,
among the dead balsams and spruces that—Satanus con-
founded them—make half the shore-lines of all the lakes in the
North Woods a nuisance instead of a delight. Government does
it. Authority decrees that because a certain ditch on which
boats may be floated, taxed, loaded and, let us hope,
ultimately sent to the demeriton bow-woos—requires more
water, the most beautiful and useful water system in
the world shall be laid under contribution for the needful
liquid to float a bulkhead scow. The bright, green, dead
are to be converted into a dismal nightmare of "drowned
lands." The outlet of First Lake has a most powerful and
commanding dam which has lowered the first three lakes 41
inches since July 12. A dam is being built at the foot of
Sixth, where there is 60 feet fall or thereabouts.

A coffer dam is in progress between Seventh and Eighth,
the Woodhulls, the Beaver, the Grass, the Oswegatchie. All
the waters in the western and northern portions of the wilder-
ness are essentially being dammed up. The bright, green, dead
has caused this time will wait. For the present I am
tempted to quote from "As You Like It," "Touchstone."
"I'll ha' be't not dammed, for this the devil will have no shepherds."
I cannot dwell on this dreary feature that every intelligent
tourist sees and execrates. If Verplack Colvin's proposition
of a grand aqueduct from the head waters of the Hudson to
New York City (supplying the Hudson Valley) should ever
become an accomplished fact, it will change the entire char-
acter and status of the Wilderness in a manner that guides
and landlords have yet to learn.

Never in the history of the Wilderness was such an influx
of visitors seen as in the summer of 1890. One naturally
asks, is this to continue? When "Murray's Fools" rustled
to the North Woods in 1869, it was thought by many, even
the guides, that the thing was overdone.

In 1870 guiding was poor business. It has picked up won-
derfully since then, but to my friends the guides of the North
Woods, I want to give a few words of advice. I have made
it a point to get my information from the men most able to
give it, and these are the guides.

My good fellows, don't run yourselves into the ground.
You know, and I know, that when the guiding season is over,
instead of \$3 per day you are ready to "hire out" for the
winter at a wage of \$1 per day and board, and few of you
can get that much.

More: when you skin a gentleman he pays the swindle
and makes a note of it.

For weeks I fished, paddled and hunted about the head-
waters of the Moose. My soul was sated with trout and ven-
ison. I longed not for the flesh-pots of Egypt, but for the
vegetable gardens at home, green peas, so to speak; suc-
cotash, as it were; the early harvest apple; the sweet though;
the summer sweeting; the fresh tomato; the dozens of things
unobtainable in the woods. All this I said to myself, as at
midnight, as I sat at the foot of Fourth Lake and gazed at
the interlarded guides and tourists, who lay over their waters
at all times of day and night. It was the fourth of Septem-
ber. In a week more my holiday was over. Why should I

Deer are very plenty all over that part of the Adirondacks. I hunted them with dogs, with several others, a week ago last Saturday, and we got three deer among us that day. The dogs were put out across the river directly opposite the Blue Mountain House. The next day, Sunday, one of our party who went down to Spring Cave, three miles below, heard some dogs barking in the woods across the river and went out to see what they were at. He found them around a large buck, who was fighting them. Having his rifle along he sent a ball through him and ended the fight. It was the largest and handsomest deer I ever saw, and would weigh 200 lbs. or over. He had eleven prongs on his horns, five on one and six on the other, and a fine blue coat of hair. It was supposed that the dog, which was a strange one, had driven him over from the East Branch, some ten miles away, and one of our dogs, coming to his help, had headed him off, and he being tired showed fight.

A party of six Philadelphia gentlemen, with guides and dogs, came on to the level the last week of August, and hunted five dogs and killed five deer, one each day they hunted. Three of them were shot within eighty rods of my camp, near Indian Rock. Two of them were large bucks, and the head and horns of one they sent home to be mounted.

There is a tract of country between Middle and West Branch of the St. Regis, and running south, to the Great Windfall, some twenty-five miles long by twelve to fifteen wide or more, which is now about the only part of the Adirondacks where the steamboat and Concord coaches have not reached or the whistle of the locomotive been heard. This is an unbroken wilderness, with not a dwelling-house on it south of Blue Mountain, and within it are many ponds and streams which are as full of trout as they were fifty years ago, and several that don't know a hook cast into their waters from one year's end to another.

One large stream, some three or four miles west of Blue Mountain, has only been visited by three persons this summer and never in the fishing season by more than half a dozen different ones. There is no signs of a path or road to it. One of the party told me he found everything just as nature made it there—not a stick cut or any sign of a human being there. He told that in the deep holes where the stream ran through a beaver meadow that the water was alive with trout, and that he had three flies on his leader, and often had a trout on each at one time. He said they were all nearly large brook trout, and some he caught would weigh a pound. There are many other streams within that tract of country of the same kind. One large stream formed by the outlets of Long and Wolf ponds, has a rough road into it from Blue Mountain, and there is a very good log shanty at Wolf Pond, which is only a short distance from the river. This stream takes its rise from Long Pond, and then Wolf Pond outlet comes in, which makes quite a river. It empties into the west branch of the St. Regis some ten to twelve miles west of Wolf Pond. It is mostly after taking in Wolf Pond outlet still water, with occasional rapids, down which a boat can run by drawing over the rapids. It runs through a heavy timbered country until near its mouth, where there is a beaver meadow and a rough shanty, where settlers below come to cut the wild grass for fodder. I went over this stream, or part of it, and found the trout-fishing all one could wish for, and many of large size. They will run from one-quarter to two pounds in weight, many of them. Very few visit this stream at any time, owing to the difficulty of getting provisions and camping outfit, etc., into it. It is eight miles from Blue Mountain House to where the trail strikes it at Wolf Pond. A horse with a sled is the best way to get one's traps in, and by valking yourself or going on horseback one could go in very well. I went in that way and had no difficulty in getting along. Mr. Phelps, of the Blue Mountain House, has horses and a suitable sled, wagons, etc., also tents and camping outfit.

There are many other streams similar to those I have described. All this region is but very little frequented—no doubt less than any other portion of the Adirondacks that is anywhere near as extensive. Game of all kinds is found anywhere in this part of the State, and can I believe, by what I have seen myself and learned from others, be found there more plenty than in any other locality, and nothing preventing, more than I know of now. I shall with a friend pitch my camp next season in its centre. Partridge or ruffed grouse are plenty in the tract wherever there is a acre of woods, which will be a large share of it. Around Blue Mountain, go in any direction you may, you are sure to scare up a flock of them.

ADRIUS OXBACK.

Natural History.

OUR WATERFOWL.

III.

ANSER ALBIFRONS GAMBELI. White-fronted Goose; Prairie Brant; Speckle-belly. Bill, red; feet, orange, with white claws; general color, grayish brown, darkest above, paler below, especially on forehead; all the feathers with paler edges; forehead, line at sides of bill and chin, upper and lower tail coverts, white; many black feathers on lower breast and belly; length, about 27 inches.

The white-fronted goose is not especially abundant on the Atlantic coast, and seldom comes under the observation of our Eastern gunners. They are not often seen exposed for sale in our markets, and those which are seen there come, for the most part, from the West. In the Western States they are much more abundant, and are found in considerable numbers during their migrations in the Mississippi Valley. They are, however, by far the most abundant on the Pacific Coast, where they pass the winter, and afford great sport to the gunners of California, Oregon and Washington Territory. A favorite method of hunting them on the coast, as described by Dr. Coues, is by means of a stalking ox. He says: "A bullock is taught to feed quietly along toward a flock, the gunner meanwhile keeping himself screened from the bird's view by the body of the animal until within range. Though I have not myself witnessed this mode of hunting, I should judge the gunners killed a great many geese, since they talk of its 'raising geese' after a double discharge of the tremendous guns they are in the habit of using."

This species is said by Dr. Richardson to breed north of the sixty-seventh parallel in the wooded districts, and from there to the Arctic Ocean. Mr. Dall found it breeding in great abundance on the Yukon River.

The American bird is regarded by ornithologists as a variety of the white-fronted goose of Europe, which, however, it so closely resembles that it could not be distinguished from it by the unpracticed eye. A slightly longer bill in the American form is the only definite character assigned as distinctive.

Anser hyperboreus. Snow Goose; White Brant. Bill and feet pink, the toothed border of the former very prominent; color, white, except the primaries of the wing, which are tipped with black; the head and neck often washed with rust color; young said to be "dull bluish or pale lead colored on the head or upper parts of the body;" length, about 30 inches.

Variety *albatrus* differs only in being somewhat smaller, measuring about 25 inches in length.

The snow goose, during its migrations, is generally distributed throughout the United States, though less abundant on the Atlantic coast than farther westward. Like the preceding species it is most abundant on the Pacific coast, but we have found it in considerable numbers in the Rocky Mountains and on the plains. Many are killed in the Mississippi Valley, and a few are sometimes taken on the Lakes. It is a most excellent table bird, far more delicate and juicy than the Canada goose.

The distribution of the lesser snow goose, var. *albatrus*, appears to be much the same with that of the snow goose proper, but it is perhaps less frequently taken on the Atlantic coast than *A. hyperboreus*. We have in our possession a specimen taken some years ago on Long Island. When killed it was in company with a flock of the common brant (*Branta bernicla*), and excited much interest among the local gunners, who were disposed to regard it as an albino brant.

Anser rossii. Ross' Goose; Horned Wavy. "Bill studded at the base with numerous elevated papillae;" exactly like the snow goose in color, but much smaller; less than two feet in length, and weighing little more than a mallard duck. Very little is known about the habits of this little goose. It is the most boreal in its habits of any of our species, and only enters the United States in small numbers during the winter. It has been taken at San Francisco, and it may enter the Missouri River country, but to the sportsmen of this country it is an unknown bird. Accounts have occasionally appeared in *FOREST AND STREAM*, from some of our correspondents near Winnipeg, of the shooting of waxes on the little lakes which dot that region. It is said that these birds are quite abundant in that section during the autumn, and that they afford good sport.

Anser carolinensis. Blue Goose; Bald Brant. Head, neck, upper tail coverts and most of the under parts, white; upper plumage, generally ashy or slaty gray, varied with brown; size of the snow goose, which it closely resembles in form. The blue goose, which was for a long time regarded as the young of the snow goose, is now considered a perfectly good species. It has much the same distribution as *A. hyperboreus*, and, like it, is perhaps most abundant on the Pacific coast. It is not uncommon, however, in the Western States, and we have seen numerous flocks of this species in the Rocky Mountains.

Phalacrocorax carolinensis. Painted Goose; Emperor. "Wavy; bluish gray, with lavender or lilac tinting, and sharp, black crescentic marks; head, nape and tail, white, former often washed with amber yellow; throat, black, white speckled; quills varied with black and white;" length, over 35 inches. This species is peculiar to Alaska and the Northwest coast. We have never seen it, and take the above description from Coues' Key. Little has been written about it, and its habits seem to be comparatively unknown.

The remaining North American geese are all included in the genus *Branta*, and are not likely to be confounded with any of those which have gone before, even by the least observant. Birds belonging to the genus *Anser* have the bill and feet pale or bright colored, and the plumage white or much varied in color; while those which fall within the genus *Branta* have the bill and feet black, and the head and neck black with white spaces, the general color of the body being gray. The common wild goose (*Branta canadensis*) is a typical example, and one which is known to every reader.

Branta canadensis. Canada Goose; Gray Goose; Common Wild Goose. Tail of 18 feathers; head and neck, black, with a broad white cheek patch on each side; upper parts, smoky brown; tail, black, its upper coverts white, lower parts ashy gray, sometimes almost white, becoming paler on belly; about three feet in length. Variety *leucopareia* resembles the above, but where the black of the neck ends there is a broad collar of white. Under parts somewhat darker than in the Canada goose, to which it is about equal in size. Variety *kutchinskii*—Smaller than either of the above; tail of 16 feathers; about two and one-half feet long.

The Canada goose is found everywhere throughout North America, and breeds in many sections of the United States. There is some reason for believing that within the last ten years pairs of these birds have nested in Connecticut, though these may have been wounded ones which did not have strength to accompany their companions to the North. We have found them breeding in considerable numbers on the Upper Missouri, the North Platte and on other streams in the West.

During the migrations they are everywhere more or less abundant, and their loud honking as they pass over high in air is a sound familiar to the ear of almost every one. The habits of the wild goose during the migrations are pretty well known to all sportsmen, and the bird is universally acknowledged to be as wary and cunning as almost any game bird with which we have to do.

The variety *leucopareia* appears to be confined to the Northwest coast, while *canadensis* and *kutchinskii* are found almost everywhere. The latter is said to be especially abundant on the Pacific coast in winter. On the Atlantic coast we have often heard gunners speak of a goose smaller than the Canada, which appears a little earlier in the fall and a little later in spring than the common form, and which they termed the Southern goose. This is very probably *kutchinskii*. Audubon speaks of a bird mentioned by Maine gunners and termed by them Winter or Flight Goose, which was probably the same.

Branta leucopareia. Barnacle Goose. Forehead, sides of head, throat and tail coverts, white; wing coverts and interscapulars, bluish gray; under parts, grayish white; elsewhere, black or blackish; length, about 28 inches.

The barnacle goose is a European species, the capture of which in America has only been recorded three or four times. It will readily be distinguished from any others of our geese, and sportsmen would do well to keep a sharp lookout for it, and if they should be fortunate enough to bring one to bag, they should at once record it, and see that the specimen is preserved.

Branta bernicla. Brant Goose. Head and neck, black; a few touches on the side of the neck, and the upper tail coverts, white; above, smoky brown; below, paler, whitening toward the tail. Variety *argiropectus* resembles the above, but the black of the lower neck extends further backward over the breast. The white neck patches are also larger.

The brant is generally dispersed over the northern part of the United States during the migrations, the common brant being the ordinary form met with in the East, while var. *argiropectus* is much the most abundant on the Pacific coast.

Dendrocygna fulva. Fulvous Tree Duck; Cornfield Duck. "Pale cinnamon or yellowish brown, darker on the crown; the nape with a black line along; head of wing, chocolate brown; rest of wing, rump and tail, black, its upper and under coverts white; scapulars and foreback dark, with pale cinnamon edgings; bill and feet, blackish;" length about 20 inches.

As already remarked, the birds of this genus are not common except along our Southwestern border. In this genus the bill is longer than the head, and the legs are very long and have the tibia bare for some distance above the tibio-tarsal joint. In other words, the leg is bare above what is commonly but improperly called the knee.

Dendrocygna autumnalis. Autumnal Tree Duck. Blackish brown; crown, most of neck and fore part of breast, middle of back and scapulars; reddish chocolate; a patch on the wing, white; bill and legs, red.

Merely crosses our Southern border into Texas.

[TO BE CONTINUED.]

THE NATIONAL ACADEMY OF SCIENCE.—The fall meeting of the National Academy of Science was held last week in this city, the session lasting from Tuesday to Friday. The meeting, which was largely attended, was presided over by Professor March, Professor W. B. Rogers, the President, being prevented by ill-health from being present.

A number of interesting papers were read, most of them, however, on physical subjects. Prof. Alexander Agassiz, gave a most interesting account of the cruise of the Blake, and the conclusions reached from his dredging operations. The following abstract from his remarks appears in the *Times*:

After giving some details respecting the previous cruises of the Blake and the points intended to be elucidated by the several expeditions, Professor Agassiz said the results obtained had shown that the deep sea fauna extended to a limit considerably higher than was formerly supposed—namely, to a depth of about 450 fathoms. At about this depth lay the outermost limit of another belt of animal life which he should style the continental fauna, and which extended from a depth of about 450 feet to one of 150 fathoms. To observe exactly the connection and relation of these faunas to each other was one of the purposes of the cruise of the Blake last summer. The coast of South Carolina was selected as a base of operations, and the region to be examined was laid out in regular sections. The first procedure was to run a line south of Cape Hatteras in an easterly direction, another north of Hatteras, and a third at Cape May. Each of these lines began at a depth of about 150 fathoms, and extended completely across the Gulf Stream. For a distance of 150 miles from the shore a greater depth than 150 fathoms of water did not occur at any point embraced in the survey, and there was very little variation from a general average, thus showing that the Gulf Stream courses along an immense plateau, which was probably the original limit of the continent. The breadth of this gigantic submarine plain was from 120 to 150 miles. Off the coast of South Carolina, at a depth of about 100 fathoms, the margin of an abrupt and very rapid declivity was found, and then for some distance a deep submarine valley. After this interval was crossed the ascent was equally abrupt. The external margin of the stream has not yet been determined, but its general topographical relations are now pretty well understood.

Prof. Agassiz next described the external margin of this vast submarine plateau and its extreme fertility in animal life. For a distance of ninety miles off the South Carolina shore our submarine explorers never carried a depth of more than 250 to 275 fathoms; but when the outer edge was once

positioned in the hatching-house and the trout, uninjured, returned to their native element. A large part of the trout taken by these gentlemen before the close season (when they had a perfect right to do what they pleased with them) were returned in the same way. It is too true that many large trout were taken at the Upper Dam this fall (previous to the close time) by using spawm for bait. The best remedy for this we think, would be to use mud-dunked fish. I have tinkered with mud, and after the first of September (if not before) to have trout taken in no other way than by fair angling with the artificial fly.

F. C. BARKER.
Capt. of Stmr. Quosacco, on Moosechuckanatic Lake.

Fish Culture.

WHY LOBSTERS ARE SCARCE.

THE New Haven (Conn.) Register has been interviewing Mr. Fuller, of the Long Wharf Fish Company, on the subject of fish, lobsters, etc., and Mr. Fuller says, in speaking of the latter:

"Lobsters, which are a favorite article of food in the summer, are kept alive in cans. They are a peculiar sort of sea-bird, are lobsters, and they are a sort of communists who live very much by themselves and in selected localities only. Ten years ago we had a large number of lobsters, and I had a half-million pounds of lobsters to supply their customers, but now \$30,000 pounds will fill the bill. Then the lobsters were worth \$2.50 to \$3 a hundred pounds, now they are worth \$6, the reason for the increase in price being the great demand for the fish and the limited supply. They formerly retailed for four cents a pound, and now the price is from eight to nine cents, and where a man could once get enough lobster for a good hearty meal for a quarter he has to pay a half-dollar. There are two reasons for the marked increase in price, the demand for the fish and their scarcity. Lobsters have been hunted very closely for the past ten or twelve years, and the result is that they have not been allowed to grow to the necessary age for propagating. A lobster has to be three years of age before it propagates, and until they reach about that age they are not good for much as an article of food. Until recently the laws of none of the States looked out for the preservation of the lobster. The laws of this State prohibit the catching of lobsters on our shores under six inches in length. The laws of New York, Massachusetts and Maine prohibit not only the catching, but the exposing for sale, of lobsters under 10½ inches in length, and these laws are expected to help preserve the lobster as a food fish. A dozen years ago the lobsters which came to our market were brought in snags by fishermen, who bought them from parties owning the pots in which they were caught. The lobsters used to run then from three pounds up to twelve and fifteen in weight, and dealers refused to take those weighing over ten pounds, on the ground that they were too large to be saleable. Snagmen used to buy lobsters on those days at three pounds, that is, each lobster was counted as weighing three pounds whether it weighed three or ten. Those weighing above ten pounds were not accepted, and the lobsters were purchased at so much per pound and sold in the same way. He who caught them found that when he came to be paid each lobster weighed three pounds, no more, no less, but he who bought of the snagmen paid for actual weight, so that the business was a very profitable one for the snagmen. Then the lobsters would average about five pounds. Now it is a rare sight to see a five-pound lobster that it then was to see a fifteen-pound, and a \$10 bill wouldn't buy a ten-pound lobster now-a-days. The lobsters that find their way to the market now average only from one and three-quarters to two and a quarter pounds. The reason for the decrease in size is that all the large seed lobsters have been caught up on the principal fishing grounds and only the partially-grown offspring remain to be caught and eaten, and closely have they been hunted for during the past ten or a dozen years.

"The lobster is a grubber on the bottom of the sea, and when caught and plucked and brought to market here some funny facts are brought to light about them. One of these is that when a lobster is given his liberty in the waters of our harbor it will always strike out for the east, none going to the westward. This is proven in this way: occasionally one of the cars in which they are kept at the mouth of the harbor will be wrecked and broken by some vessel, sinking or leaving the harbor. The lobsters scamper away from the broken car and with great rapidity crawl to the eastward, where they are frequently caught in the lobster pots spread between Branford and New London. They are known to have escaped from the car because their claws are plucked and because they are larger than the lobsters which frequent our shores. Never yet have any of these escaped prisoners been captured west of this city, so far as is known hereabout. The lobsters don't like New Haven harbor as a place of residence, and get away from it as quick as they can go so. The lobster has to crawl away, too, for he is so peculiarly constituted that he can only swim backwards. This he can do quite rapidly, too, by the quick folding under him of the flexible tail. So the lobster is an 'fish tail'—when he wants to swim ahead he has to swim backwards."

MAINE SARDEINES.—The Sullivan Bulletin publishes an interesting account of the work done at the sardine factory at East Lamoine. The fish used are the smallest herring such as used to be thrown on the ground for fertilizing purposes, and the labor involved in their preparation for market is thus described: First, the boatman goes on a visit to the weirs in Frenchman's Bay and is not successful, around Mr. Deser's anchorage, Union River Bay into the rivers and among the small islands where weirs are built, and if possible gets fish into the dories he has in tow; then through log or blow makes the quickest time possible for the work. Oftentimes he returns without any colors being set, that being the sign of "no fish," when successful he runs in to the track laid down to low water and the dory having the fish is placed on a car and drawn up under a long shed, the fish are washed and sorted, the small ones placed on long tubs, and the larger ones on wooden barrels. This is called the cutting shed. Alongside these tables, having boxes ranged on them, are young boys and girls, armed with small sharp knives, who cut the fish into just the length for the sardine boxes, and when these boxes are full they are passed into another room called the flake room; they are then taken and placed singly on flakes made of wood, and after dripping are passed into the drying room—a close room on the second floor with racks into which the flakes of fish are passed. Below is a very large stove, burning wood, which soon dries the flakes

of fish. Thence these dry flakes are passed into the frying room where a large furnace or oven is at fever heat, and the fish are placed in large pans and with great care are fried. Again the carriers take them and pass them to the packing room, where the quick fingers of women and girls place them in boxes and pour pure olive oil and other seasoning preparations over them, and into another room they go called the heading room, where each box receives the heading or cover. From this place the boxes pass to the sealing room, where long tables with portable furnaces and all necessary tools for soldering purposes are found, and young men with soldering irons soon prepare the boxes to be passed into the bath room; a large tank, holding more than a hoghead of water, heated to a boiling pitch, receives them, and after remaining in the bath a certain time, the boxes are passed into the examining room, where every box is examined carefully for leaks, and if any are found they are passed back to the sealing and bath rooms. Those that are passed are sent to the cleaning room, where large box-like tables, filled with dry sawdust, receive and deft little fingers cleanse them of every particle of oil and dirt, and they are then passed to the final examining room, every box pressed between fingers and thumb to see that they are all perfect. The final packing room receives them, and they are packed one hundred boxes in each case, branded and ready for shipping.

The boxes in which the sardines are packed are uniform and bear the same marks in all the several factories. Making the tin boxes is a separate trade requiring a large amount of machinery, and as the business increases the several companies will have a manufactory of their own.

This company, and in fact all the companies, pay their work-people every Saturday, by the piece, or, as it may be, by the day.

Game Bag and Gun.

THE RISKS WE RUN.

A SHORT time before the war the writer, a young lawyer, full of hope and mainly ambition, a resident of the beautiful country town of Magnolia, in the southern part of Arkansas, fond of his gun and the woods, and never missing an opportunity to indulge in his favorite and health-giving pastime, was, on a sultry day about the middle of September, sitting in the west end part of the office poring over some of the law question, when a little darky entered, having a pair of saddle logs across his shoulder. Fumbling in his pocket he produced a bundle of newspapers, which being unwrapped disclosed a modest little *bulletin* which he handed over. I proved to be short, pointed, but to me full of meanings; it read thus:

"Protracted meeting at Christy Chapel next Friday, Saturday and Sunday."

Now, there was nothing apparently in this notice calculated to stir a man up, but short that it was, and only referring to a church meeting, yet it whispered to me of a peaceful home, a future of love and bliss, shared by a pure, noble, warmhearted girl who was then thinking of the poor, ambitious young attorney, and the knowledge of this fact sent the warm blood tingling to my finger tips.

I returned to my desk, books and State reports scattered about my chairs, placed them on the shelves, consulted the office docket, and found one case before Squire Nelson set for Friday. That put a quietus on starting at once. So, next day, after being granted a continuance, I hurried through my preparations, ordered my buggy for one o'clock sharp; and dressed in a light summer suit, part of which was white pants and close fitting cloth jacket. One o'clock found my rig at my office door.

It would be supposed that a person dressed as I was would have no use for a gun; I thought different. I knew that the father of the young lady who had sent me notice of the meeting at Christy Chapel was a great huntsman, a splendid shot, kept a pack of hounds and was in the saddle half of his time behind them, and I thought it best to be prepared for either church or the chase. I took my gun, a six and a half pound, thirty inch, fourteen gauge, highly finished double German, with a supply of Ely's wire cartridges. Also pulled out my high waterproof boots from their corner, but after reflection put them back, for really I had no thought of hunting.

I started on my journey of twelve miles to the large, highly-cultivated plantation of J. T. Furrow, Esq., situated on the south side of Horseshoe Creek, in the southern part of the county. My horse was fresh, I made good time and in due time reached my destination, and found that the gentlemen of the house were out on a fox chase.

After evening when the tired huntsmen returned, a new and extended hunt was planned for the morrow, I was out of my—*to*—all save one—unexpected visit. This did not suit me, but I could say nothing. Had I not told the old gentleman the object of my coming was a hunt, and he knew I loved the sport, so I held my peace.

Saturday morning saw five of us mount. Mr. F., turning his horse toward me, stopped suddenly, looked at my linen pants and cloth gaiters and queried, "Where are your boots. You cannot go to the bottom with those shoes. Forget your boots? That is unfortunate. However, you can take the stand in the overbo, there is no underbush there." So each one took their turn to their allotted places, Mr. F. taking the dogs down the bottom, intending to drive up the creek. My stand was in the centre of the bottom in a dense, unbroken forest, at a point where the last spring overbowed had swept the ground clean of all rubbish, leaving a space of about two acres as clean as a threshing floor, with the exception of a large hollow log that had stranded near the centre. The standing trees were wide apart, with spreading tops, that shut out the sunlight. After securing my horse in the edge of the thicket, I selected the stranded log for my stand, but after remaining there a short time I moved forward and stood behind a large spreading oak, some twenty steps from the log.

The forenoon had passed in silent watching and waiting to hear from the dogs, which seemed to be playing from side to side of the bottom, in down the creek, but coming no nearer. Past experience had taught me to stick to my post in silence. When the sun had reached the meridian I had intended to eat my lunch; but I deferred it on account of a strange chilly sensation that crept over me. This feeling returned at short intervals for about half an hour. I paid but little attention to it, but as time passed the feeling grew more intense. Sharp, tremulous thrills ran up my back, leaving a twitching sensation that made me very uncomfortable. This continued for about an hour, and settled into a deadly fear.

I trembled from head to foot. I glanced furtively from side to side, but all was clear and still. I strove to brace up against it, tried to shake it off, to no purpose. The more I tried to master it, the more intense the feeling grew. At length I thought of a pantioler, for they were no strangers in the bottom. Perhaps there was eucroaching in the branches overhead ready to spring on me. I held my gun firmly, on full cock, searched every limb and branch overhead on each side and behind. I could see nothing. I held my post rigid as a statue. It was a perfect calm; all was silent; the stillness was oppressive. That suffocating sense of danger grew upon me; I was afraid to move, yet could hear, could see nothing to cause it.

Calling up all my fortitude, I determined to shake off the terror that had seized me, and I had partially succeeded, when a sharp sound, quick as the stroke of a battery, went through my ears, adding intensity to my high-strung nerves. Not knowing where the strange, and to me new, sound came from, my eyes searched the ground, first on my right, then in front, next on my left, all in quick succession, when the same infernal, blood-freezing sound was repeated—nearer, clearer, deadlier than before. Quickly peering over my left shoulder I saw, coiled up, within three feet of where I stood, a monster rattlesnake, its head flattened out, swaying from side to side, drawing back, preparing for a spring, its tail erect, and for the third time sending forth that blood-curdling whirr-r-r-r. All this took place and was seen in a second of time, and while my eyes were fixed on those of the reptile its jaws were opened to their full extent; then the bright barrels of my gun came in line with my sight—how it came there I know not—I had made no effort in that direction, but there they were. I pressed the trigger, then a flash, report, and a heavy blow on the call of my right leg. I had missed and was struck. Miles from a house, no help near; death stared me in the face. My first thought was to spring from the tree and fling my gun. I pulled out my handkerchief and tied it round my limb, using my knife as a twister. The snake was slowly lifting and I saw the repulsive monster writhing in its death agonies, headless, at my feet. I then examined my limb. My fine white linen pants, from the knee down, including my dainty gaiters, were smeared with the blood of the snake. It struck, and that hard, but headless. My powder was too quick for it and had blown the head to atoms while it was at work making the spring. I actually kissed my faithful little gun, for it had saved my life.

I went off and sat down, sick and trembling, my lips and throat parched. After a rest I went to the creek, haved my temples and drank a mouthful of the tepid water, returned to my stand, loaded my gun and calmly investigated my now past danger.

The snake had its den in the stranded log. It had seen me standing motionless by the tree and had crept with the stillness of death toward me, as its broad trail on the bare, dusty ground showed, and while my thoughts had been directed in search of a panther in the tree-tops it had escaped my notice on the ground behind me. It must have made slow progress, as the feeling of danger was on me more than an hour, and when it reached striking distance gave the first note of warning. But what invisible power told me of my danger? Can anyone explain it? I cannot; it is a mystery to me even to this day.

I measured the reptile, which, without the head, was a fraction shorter than two lengths of my gun barrels. I cut off the rattles, which were nearly eight inches in length and eighteen in number, with some success. This ended my hunt that day.

When I returned to the plantation with my trophy I found the other hunters there before me and two large bucks hung beneath the eaves of the smoke-house. After recounting my adventure and exhibiting my pants and gaiter, the old gentleman remarked: "I thought you ought to have your boots on; you will bring them next time." I thanked him. I was easily persuaded to stay over the next day. The wide-spreading grove that surrounded the cool porches of the dwelling of my generous host was so inviting that we concluded not to attend Christy Chapel after all. It is but fair to state that the faithful little gun that saved my life was a short time afterwards forcibly taken from me, while returning from a squirrel hunt, by a squad of Texas troops then on their way to—*as they stated*—Chicago. CAPT. ROCK.

Cape Girardeau, Mo.

We invite the special attention of the readers of this column to our Proposition to Gentlemen Sportsmen, to be found on another page.

NORTH CAROLINA QUAIL SHOOTING.

I HAVE just returned home from a thoroughly enjoyable shooting trip to North Carolina, and as you have requested your readers, for the benefit of the rest of their species, to give the result of such expeditions, I send you this account in the hope that some former, disinterested reader of the craft "seeing, may take heart again," and follow in my footsteps, for I can assure him that if he will take the point I will mention as a center he can go in any direction and find all the quail shooting he could, would, or should desire.

Early in the year past I was told of a trip South to see if the shooting was really what it was "cracked up to be," and after having consulted guide books and wearing our friends with inquiries, it suddenly occurred to me that the likeliest person to tell me where to go would be the man who cultivated my inherent love of the field, and who taught me the first principles of "holding my pipe straight," now a resident of North Carolina, so to him I wrote. His answer came at once—"Come down here," and although we had rather settled our Virginia as a temporary abiding place, we entered our plans.

Saturday afternoon, October 30, found us on the deck of the steamship Old Dominion, bound for Richmond, for, although we could have gone by rail all the way, we found it easier on the dogs and less fatiguing for us to travel part way by steamer. The fare to Salisbury, North Carolina, by rail or steamer is the same (\$22.80). The company makes no charge for dogs, and the baggage master took care of them and they did not feed and watered, and was apparently satisfied with the gratuity of a dollar for each dog that I gave him.

Now we are fairly off and run down the bay in a cold northeaster, with its miserable, penetrating drizzle, until off Sandy Hook Fred suddenly realizes that all is vanity, and "seeks the conclusion that the cabin grants." I, after vainly essaying to eat my supper, follow suit, but after lying in my berth a while, feel quite chipper, and actually have the malignity to chide him for his unhappy conduct and remind

him of the old but very excellent description of sea-sickness, *i. e.*, that "during the first hour a man is afraid he will die, and during the second he is equally afraid he won't." However, by morning we are all right and make up for lost time. Sunday evening we arrive after a rough passage, which had no other effect on me than to develop an inordinate appetite and going ashore we give the dogs a good run and go to bed.

Monday morning when we awake we find it a lovely day, and that we are quickly sailing up the placid, mud-colored James. We spend the day sitting in the sun, which feels very comfortable in the cold. We are watching the flocks of ducks that the steamer flushes and seeing how near we can come to hitting with our revolvers those that tempt Providence by remaining in the water within twenty-five or thirty yards of us. The scenery of the James is low, flat and uninteresting for the most part, but you have this one advantage not often enjoyed in other localities, that you see both sides of any rises there may be, for the river winds three-quarters of the way round each of them.

At City Point there is time to run the dogs again, and then we arrive at Richmond at about five o'clock.

Taking a hack we drive to the Richmond and Danville Railroad depot (fare \$1.50 for the party), and having checked our trunk and left the dogs in the baggage-room, we wander round the city till 10 o'clock, when we return, secure berths in the sleeping-car (\$2 each), and have time to get comfortably asleep before train starts at 10.30. This road has adopted the very sensible rule of having a tariff on dogs, which is fifty cents per 100 miles, thus making the cost of each dog \$1.25 from Richmond to Salisbury, and the employees do not expect, but actually refuse the bonus I offer them. We are roused in time for breakfast at 7.30 at Danville; forty-five minutes are allowed for the meal—so using half an hour for ourselves, we give the dogs the benefit of the rest. We reach Salisbury at 11.50 a. m., and here is the point I have been resuming all this while.

Here, at the Mount Vernon Hotel (terms \$2 per day), you will find good beds, an excellent table, a genial, pains-taking landlord—MacNeely by name, called "Mac" to save time—and more invitations to go shooting with parties who are happy to share their plenty with strangers, provided they are gentlemen sportsmen, than you can accept, unless you stay all winter. I won't guarantee longer than that, but I will guarantee that you will find all that you hold dear, and that you will find it worth your while to visit Salisbury, and if you are a sportsman you won't wish for more.

The Western Railroad of North Carolina starts within a hundred yards of the hotel and runs two trains a day, so that at any time you can step on the morning train and by running ten or fifteen miles visit "fresh fields and pastures new," and at any place find as much shooting as any one can desire and return to your hotel on the evening train.

Our objective point being Cold Spring, twenty-one miles from Salisbury, we take a carriage and drive over a very bad road (fare \$3 for the party), arriving about 7.30 p. m. We are hospitably received by my friend Ed, and his wife; and are ushered to our room, where the huge wood fire that burns in the open fire-place looks very comfortable after our chilly ride. They tell me they have had no rain since August 4, on the strength of which I guarantee them a sufficiency, for I am exceedingly anxious to see the country, and to see the conditions. Surely enough—the next day when we awake the sky looks very dubious. However, we take a brace of fresh dogs and sally forth, and less than a quarter of a mile from the house find in the corn stubble. The heavy rises: Ed does not shoot, so as not to discover us in the least; I miss beautifully with both barrels; but what is the matter with Fred? Without raising his gun from his hip he has fired both barrels into space and is looking round in a dazed manner. "What is the matter with you, Fred?" I say. "I haven't!" I don't know," he answers; "but the air seemed full of them, so I cut loose. It did not seem as if I could miss all." After a laugh at him and considerable chaff for me, we go on to pick up the scattered birds, which have dropped into the bushes that fringe a narrow "branch," and in less than an hour we have twelve birds, when down comes the rain and we start home, contented with everything but the weather, and hoping and planning for the morrow. As the "morning" rains all day hard and does not clear until the night.

The next day we go out, but find comparatively few birds, as they have not yet worked out of the heavy cover, where they have been driven by the two days' storm. However, as we rise over the crest of a hill I see what I think are crows feeding on the opposite hill-side, perhaps a quarter of a mile from us, and point them out to Ed. "Crows?" he says; "those are wild turkeys," and as he speaks they have seen us, rise and we count twenty of them as they fly over the river into the heavy timber. We spend a little while trying to head them off, but do not see them again, and resume our quail shooting.

Let I should be considered vain-glorious, I will hereafter not mention the number of birds bagged, but will content myself with a report of the number of shells ejected at quail each day. To begin with this one, we find when we return home that we have fired about thirty shells apiece.

The next day, fired by the sight of the "turks" the day before, we determine to hunt them, and after considerable crawling and creeping find a flock of fourteen. We get within 200 yards of them twice, but each time they feed from us and we do not get a shot, and conclude that when one's time is limited he had better stick to quail.

So followed one day after another, except that we did not again have two successive days' rain, but only had about every other day which kept the birds from running out into the stubble as freely as they would have done otherwise. Still, we always had a bunch of birds, rabbits, gray squirrels, etc., ranging, and using regularly to eat about twenty each day. We never got less than thirty good shots apiece during the day's shooting, from 10 till 4 o'clock, and we generally had nearer fifty. The last day we were out we found fourteen beaves, containing from fifteen to thirty each. We invariably found them in the rag weed or corn stubble, and the birds, when flushed, would drop either in the "broom grass," the blackberry bushes that lined the fences, or the woods, but as the last are free from undergrowth, they do not bother one much.

So our three weeks' vacation slipped away, and we had to turn our steps reluctantly homeward. We spent some time in Richmond, Norfolk, Fortress Monroe, etc., on the way up, and so increased our expenses somewhat. We paid everywhere, and we did not economize in any particular, and yet we found on reaching home that our expenses had been less than \$90 each, including cost of ammunition. Altogether I look on it as a most satisfactory and pleasant trip, and I sincerely trust that before long the same hills will again re-echo the report of the trusty Scott of Salisbury.

LONG ISLAND TRAPPED BIRDS AGAIN.

New York, November 20, 1890.

Editor Forest and Stream.

In answer to your most polite invitation to me to come forward and prose by sworn testimony the contents of my letter to you of November 6, I would say that, with most due respect to your invitation, I must and will decline for the following reasons.

In writing you said letter, I wrote and gave you my knowledge and impressions as a shooter, and not as a detective and a spy. I have shot game for the last twenty years, and the larger the number of birds I shot, the more I am a quail; and, therefore, as a shooter, I can form an opinion whether a bird is a shot one or a trapped one, especially after holding it in my hands. On the occasion I have reference to, and what gives more strength to my opinion, I was in company with another game shot of a good many years standing. We both examined the birds and both came to the same conclusion. Mind, we did not buy any birds, nor did we purchase, and, therefore, my opinion could not be turned into sworn testimony.

When I wrote you my letter I was not thinking about the past. I was thinking of the future, of the birds that might be saved, and about what might be and ought to be done to save them. I dare say a good many more men than I have put their heads together to solve that problem. Not one man, nor ten men, nor one hundred men can do it at once—it will take years of labor and study. I might even say education. Legally a man might be wrong, morally he might be innocent in infringing upon a law which he does not know anything, which he cannot comprehend because it has never been explained to him. For the last ten years our game laws have been so changed and amended that it is no wonder that our country cousins do not know them, nor care to know them.

What then are and ought to be the duties of our game associations? First of all to teach the people the game laws. The laws ought to be sent broadcast all over the country: there is more to be done by moral influence than by coercion. Everybody knows that there is a game law; but how many know its contents? Print the game laws by the thousands, scatter them over the country, offer rewards, but by all means do not let the game associations fall into the error of expecting the community to be their detectives and their spies. Each man to his duty.

Now a few words in answer to this letter, written by order of the standing Game Law Committee of the I. L. S. A. Those gentlemen accuse me of being a coward, and of writing to you letters more for the sake of notoriety than of being of any assistance to them. They say that they cannot play the part of detectives, but of course they expect me to be one. If I wanted the notoriety that these gentlemen say I want, I would certainly answer them in a different style. I would answer their letter in the same spirit that they answered mine. Unfortunately, one alteration might bring on another and before I would get through with them their own answers might show to the public that they are not quite the Nimrods that they appear to be. But, as you say in your editorial note, they are a young organization which wants to be, and ought to be, encouraged; and therefore I shall refrain from any further remarks, but by some friend might be turned into reviews. Those gentlemen protest against my assuming a non-de-placé. Do I, by doing so, commit a greater offence than that of many of our foremost and most gentlemanly sportsmen. Have you ever seen the "Gillette's," the "Alkins," the "Steeles," the "Butlers," the "Lees," the "Williams," and hosts of others. I have not. But I have read them often. After all, what is there in a name?

P. S. I send to you to-day a pair of snared quail. So kind as to acknowledge reception of them. These quail were bought for me by a friend at one of our public markets. This same friend informs me that he can get all he wants of them, at the same market, by asking for them and by paying for snared birds, one dollar per dozen extra.

PHILADELPHIA LETTER.

LAST week a half-grown prairie chicken was brought to Mr. John Kridler, of Philadelphia, for mounting, the bird having been sent from near Delaware or Maryland with a lot of quail to a game dealer of our city. I will be remembered that some years ago Dr. Linnell, of Berlin, or Snow Hill, Md., liberated several pairs of pinnated grouse or prairie chickens. It is known that they had bred and hatched, as broods were seen on several occasions, and their nests were even located. The writer, while shooting on Ninexpent Sound, in the section of the country referred to, made inquiries as to the success of Dr. Purnell's experiment, and satisfied himself that the "flocks of strange birds" seen by the natives were veritable pinnated grouse. Why do not those of your readers who were interested in "planting" prairie chickens in the State of New Jersey inform you of the result of their laudable undertaking? Such matter is always interesting to the true sportsman.

We have learned that hawks and other like birds of prey are unusually plentiful this year. Taxidermists are securing quantities of them. This does not argue favorably for the quail, as poor Bob White suffers much more from the depredations of the winged pirate than from the sportsman. The fact that it has been five years. The red-tail hawk does little damage to the quail and is mainly a mouse hunter. It is less plentiful. Last week a white or snowy owl was seen in Independence Square perched on the top of one of the lofty trees. He remained quietly gazing on the scene below him for fully two hours and then on folding his wings sailed Westward.

We were handed a letter to read from Maine, dated Nov. 5, last week. At the time of writing the correspondent stated that snipe and woodcock were still in his State, and that little or no frost or cold weather had been experienced. Ruffed grouse were very plentiful with them, bringing but twenty-five cents per pair.

We wish to make mention of some remarkable rifle shooting done by our fellow townsman, Mr. Lancaster Thomas, a short time since. Mr. Thomas shot only the Stockton range, and without a sighting shot made twenty-five bulls-eyes at 500 yards, the last six shots being fired late in the afternoon quite near dusk. This certainly deserves to be recorded, and we request Mr. Thomas to score as well in the next tournament.

The Eastern sports of last week brought a few brant to the New Jersey bays. Not many have been killed however,

and there are only a small number of young fowl among them. For fine shooting we always look for a good proportion of young birds in the flocks, as they shoot much better, the old brant coming along with them. The peculiar honk of a "this year's bird" is readily distinguishable from that of an elderly one, and always delights the ear of the fowler. Your correspondent could relate of many a day of glorious sport in Little Egg Harbor, at the Bunches, East Sedge, Goose Bar or Little Island, when the brant were on, and the wind and tide just suited, but will reserve the account for a future letter. Let me say now, however, it is a sport that requires a sturdy constitution, a willingness to endure hardship and the patience and cunning of a cat. "The more dirt the weather the better brant fly" is an expression of the bay men.

Our mutual friend Dr. Twaddell, and his brother George, are off at present on a shoot. George and a friend are paying their attention to quail and woodcock only, while the Doctor has with him his merry little beagles and will devote his time to the cotton tail, and enjoy the musical voices of his hounds. We stopped at the Doctor's house during his absence and had the pleasure of looking at his beagles, Oscar Fritz, Sam Kerlie and Franklin a very beautiful beagle bitch, and a black-and-white and tan Southern beagle, the two latter new additions to his kennel.

Your correspondent has just received a letter from Mr. C. H. Whitman, of Leavenworth, Kansas, enclosing two beautiful photos of the Laverack setter Pedigree now dead. Mr. Whitman has just returned from Europe, having had a fine opportunity of visiting the noted kennels of Great Britain. He tells me he has a son of Pedigree the image of his sire, but larger in every way.

Now that Mr. Whitman is with us we shall expect to hear an account of this promising dog.

The man who thinks that he can afford to pay the farmer's boy more for quail than the boy is paid by the baggage-masters is invited to send his address to this office.

STRAY NOTES FROM PHILADELPHIA.

PHILADELPHIA, Pa., Nov. 18.

THE biting air which last night began to make our ears ache has served to precipitate the movements of those leisurely sportsmen who have for many weeks been planning elaborate expeditions to Pike, Wayne, Monroe and other interior counties of this State, and has caused a few individuals of the alleged feather-bed sort to postpone indefinitely expeditions, which were as yet too embryonic to deserve the name of "expeditions." Whether or not George Kennan's "Dog Sledge Journeys in Siberia" precipitated this movement cannot be ascertained, but several acquaintances who on last evening listened to this excellent lecture on the travails of the hardships and privations incident to a life in a well snug suit part of the country of the Tchukchees, where such winter temperatures as 40 deg., 64 deg., and 68 deg. below zero are not unusual, exhibited this morning indisputable signs of having the "Florida fever"; and during the day at the gun stores and other places where sportsmen most congregate, I have heard of more than a dozen who propose now to start to that State for the winter, some of them persons of leisure and means.

Curious enough, Bayport, Fla., was on every tongue, several men declaring that Willis's letter telling of Mrs. Garrison, who'd furnish good board in a game district for \$4 per week, was all they wished; that they meant to start at once and "head off the crowd," etc. Those who spoke of going "at once" were one of the moneyed class, two of them being trappers from northern Michigan, or somewhere up there, claiming to have in all an assortment of seventy-three steel traps. There is no doubt that but for the rather stiff rates of passage thither, and comparatively high rates for board in Florida, the exodus from the North this winter would prove a most astonishing one. As it is it will be great; and it is interesting to note the almost instantaneous effect produced by the publication in FOREST AND STREAM of any apparently truthful account of a new Florida game district. Without a doubt, Willis's letter has already started enough sportsmen to Bayport, to fill Mrs. Garrison's house—garret and corn-crib included—to overflowing; and if she provides one orange for each guest, possibly she'll have to "draw" upon Dummitt's Grove, in the Indian River country, for the golden spheres.

A continual juggle alight to citizen and sojourner are the gun-stores of our growth city in winter, may often be found squads of sportsmen of very various degrees of knowledge and eagerness and in the most friendly manner discussing "the latest" wrinkle in sportsmanship and its myriad appliances. So greatly do "the brethren" congregate at "Uncle John" Kridler's that it is difficult to get many extended personal chats with Seiner, his superintendent—always called "John" by his customers and friends—but they seem to cover these "chats" greatly and scarcely give him time to eat his dinner. Mr. Seiner's opinion is valued for the simple reason that he is known to be a conscientious man. The old gentleman "Uncle John" K., has for twenty-six years served as treasurer of the Order of Mechanics. Taxidermy is now his pet and all engrossing theme. The Grubb House (J. C. G. & Co., 712 Market street) is one of the vast gun houses of the land, and after a sojourn in the far West exchanging "field notes" with the keen and accomplished dealers of St. Paul, Cheyenne and Frisco, it is no small feat to be able to inspect in this establishment guns of almost every sort under the sun from the cheapest Belgian, to the "gens"—turned out for princely purses only—by such builders as Pope, Lang, Douzal and Purdey. Weapons of the latter class seem to be the "best bolt" of the house, some of the aristocratic "Purdeys" being so artistic that it seems almost sacrilegious to soil them with villainous gunpowder. The storm-tossed sportsmen from prairie or ocean in quest of gun boats can easily fall into the hands of a more genial gentleman than Col. Jno. McLoughlin of the above named firm.

The wonderfully extensive establishment of Tryon & Co. is doing a fine business. Maj. Comstock—the genial "Harry" so long with the Remingtons—was in town the other day. He now represents L. C. Smith, the "Baker gun" man, and seems resolved to go at once to Florida. With him this is "the last of the prophets." But a "three-barrel." Then everything—humming-bird or hiron—is "your meat."

W. McK. H.

Iowa—Vail, Nov. 16.—Quail have been more plentiful hereabout this fall than for many years previously.

E. E.

SOUTHAMPTON SPORTSMEN'S CLUB.

THE well timed and highly interesting article which recently appeared in your valuable journal calling attention to the practice of snaring birds by farmers on Long Island, which tends to the destruction of the favorite sport of shooting and pointing out the necessity of some new club with young blood who will not pursue pigeon shooting as it was the only sport left, does not, I beg leave to assure you, apply to one club, at least.

Situated at the east end of Long Island is an association of twenty gentlemen who during the short time of their existence as a club have done much toward the protecting of game and promoting the interest of shooting generally. I refer to the Southampton Sportsmen's Club, chartered under the laws of the State in 1878. They have acquired preserve lands to the extent of 8,000 acres. By a resolution the membership is restricted to the number of twenty members, one-quarter being shining lights of the New York bar, the legal rights of the club are therefore fully protected.

At a recent meeting it was decided to employ counsel to prosecute persons detected shooting or snaring game in violation of law. Judge Thomas Bisgood was assigned to this important work, and a man was employed to detect persons guilty of trespass. Within a few days two persons were detected in the act, one being a wealthy farmer of the vicinity. It is determined to prosecute these parties to the full extent of the law.

Let other associations follow this example and there will soon be a stop put to the destruction of a sport which in the past made Long Island famous.

At the meeting mentioned it was resolved to stock the ponds on the lands of the club with bass. RANBLER.

KENTUCKY NOTES.

MILL SPRINGS, Ky., Nov. 1.

QUAIL are not so plentiful as we were led to hope during the early summer. No good reason assigned. I was out a few hours Friday and put up but two half-grown doves. As they were not out of the "peeps" I returned homeward dejected, with the performance of my young pointer, which evinced a wholesome recollection of a dose of 40's, soon followed by one I was startled to find 3's, administered last season at forty yards. It cures him of his uncontrollable propensity to flush and chase, which had been developed by the boys stealing him out to trail squirrels before he had been worked on quail. Tail and head in line, the ears protect the eyes, and I have in every instance found a charge of 8 to 10's the most soothingly persuasive argument at forty to fifty yards I ever submitted to. A refractory worker in the field. A bird which is never to be risked, nor should you be shot. But my wilful gent always catches the peeping, which I esteem infinitely more humane and know to be wonderfully more efficient than the ear-pulling, side-thumping, whill-raising punishments administered by many hunters. I have almost exhausted myself with whip for chasing to enjoy (?) the whooping up of a rabbit, who had been an eyewitness of the punishment, and seemed to hie away, as a matter of solace to the sufferer.

What sportsman being not of similar experience and found little comfort in thinking "d—n it!" loud enough for his companion to shrewdly guess the current of his feelings? I would not be understood as an advocate of indiscriminate use of shot, but experience has created within me a weakness for the remedy in malignant cases, having always found it a specific. But mallards and bluewings are appearing in small bunches. Pheasants plentiful in mountains, turkeys scarce. No pigeons. Squirrels migrated last fall and have but just begun to return. No parties have been deer-hunting as yet. Bears are represented as plentiful on our favorite hunting ground near Tennessee border.

A neighboring paper lately published a paragraph to the effect that some destructive epidemic has attacked the deer in the vicinity of a summer resort or two, and that as many as fourteen carcasses had been stumbled over in a day. A mosquito-net is a thick fabric in comparison with that fabrication.

KENTUCKIAN.

MORE ABOUT WILD RICE.

I NOTICE an article in your last issue on wild rice, over the signature of "Lutron." He remarks: "There seems to be a desire among sportsmen to introduce this most attractive water-fowl food where it is not natural to grow. Artists are FOREST AND STREAM, seems to me, will lead those who are going to plant to failure. Some time ago the FOREST AND STREAM recommended planting in six feet of water. I have never seen a spear reach the top and head out at that depth."

Now, not having the slightest reason to doubt the correctness of your correspondent's observation (I have never been in Michigan), yet in this locality my experience and observations differ very widely from his. For instance, in Rice Lake, a body of water twenty-eight miles in length, with an average width of three miles, the wild rice is frequently found growing in water from six to eight feet deep, and this is no exceptional case, but the rice is found from one end of the lake to the other growing at that depth and producing an abundant crop of plump, well-filled grains, upon which feed the various kinds of ducks and other water-fowls fed with avidity, but also the Indians (who have an exclusive right to it from the Government) collect it in large quantities, both as an article of food and for planting purposes. They prepare it by cooking, or roasting, until the husks separate from the grain and then fanning off the chaff. Being prepared in this manner and boiled, it forms a thick, mucilaginous paste, which is very palatable and highly nutritious.

In 1876 I sent twenty-five bushels of rice to Campbell's Bay, Ottawa, where it was sown in water from two to five feet deep. It grew well, and in the fall produced a good grain crop and extended rapidly. The person trying this experiment and his neighbors, being so well pleased with the result, have nearly all the previous years stocked with rice this present year from me. They have also obtained eighty bushels of seed to be planted in the adjacent waters.

As regards the sowing of this rice, I consider the fall the best time; but with care, and having it kept thoroughly dried, it may be sown very successfully in the spring.

One correspondent asks: "Will any one tell me whether or not thoroughly dried rice will grow?" I can verify that it will, having dried it for six months before sowing. In the case of the grower manner to which it is sown, as it is, it is liable to heat and turn moldy, which would destroy the germinating principle and render it worthless.

Your correspondent also states that the rice that he examined was sown as early as March 20 to 25, which is much earlier than it does here. As soon as the ice disappears from Rice Lake, which was from the 15th to 20th of April, the ducks appear in great numbers and feed on rice by diving for it on the old rice beds in water from ten to twelve feet deep, the water being higher in the spring than it is in autumn. I have watched those birds feeding and shot them, and on examining their stomachs found them gorged with rice; but none of the grains had shown any signs of sprouting at this time.

A year ago this fall I sowed a peck of rice which had been extra well dried. This was planted in water four feet deep, on mud and gravel bottom. It made its appearance about the middle of June and ripened the first of September, producing a fair crop. C. GILCHRIST.

How it is ELSEWHERE.—The game grounds of New York, are not the only ones which are being depleted of their game birds by the trappers. Commenting on the FOREST AND STREAM's remarks about the opening of the quail season the Evansville, Ind., *Argus* says:

In this part of the country the birds are nearly all fully grown, though we have seen since November 1 two coveys of birds that were only half grown. Quail are becoming very scarce in this section of the country. A few years ago an average shot could get from forty to sixty birds in a half day's shooting, without much trouble. Cold weather of two winters ago killed a vast number, but on an average the weather does not have one-fourth the bad effect on quail that netters do. There is a law in this State regarding the offering for sale of netted and trapped quail, yet never was a law more entirely disregarded. Merchants constantly offer them, hung up boldly outside of their doors, and never a word is said to them, though there is, or is supposed to be, a Sportsman's Club in this city. Various devices are resorted to by the pot-hunters to deceive buyers. The most general way is to pick the netted birds, hang them up and then blow shot at them from a gun. The birds are then on the ground, naked birds, which look very much like real shot marks. As it now is, there is no good shooting in this neighborhood. This vicinity is overrun with boys and reckless hunters, who think it is a good joke to shoot hogs and cattle and even horses. Is it any wonder that farmers make no distinction between good and bad hunters, and order all off their grounds? What shall be done? We put this question very respectfully to the Sportsman's Club, hoping that they will take some steps to see that the game law is just now, as it is enforced. If things continue as they have been a day's good quail shooting will be a thing of the half-forgotten past. We hope to receive some communications on this subject. True, many of us do not hunt, but for the benefit of those to whom hunting is their only relaxation from business, for Heaven's sake let us do something, or sell our guns for old iron.

EXTINCTION OF QUAIL.—*Watson, D., Nov. 20.*—Your correspondent, "A. S. P.," speaks of quail trapping, and says "of course" the quail remained treed "but an instant." I have shot a number of quail this season and I notice whole flocks very often break and take to the trees, and then they tree they stay treed until the hunter gets almost close enough to shoot. One treed this week while I was shooting in the flock. My dog pointed two on the ground within 200 yards of the treed bird. I shot the birds my dog pointed and the bird in the tree remained treed until I went toward him. He must have remained treed five minutes at least and was not disturbed by my shooting. As to ruffed grouse, I know that some market hunters in the north part of our country (Fulton) use a cur for hunting them altogether. The cur barks when grouse take to the trees, and they alight in the trees and the market shooters pick them off. Quail-shooting here, I fear, will soon be used up. The pot-hunters take cold days and evenings for their work, find the birds huddled to keep warm, and then they villainously destroy a whole bevy at a single shot. I have heard of many such instances and have seen the marks of their work myself. The sportsmen here are agitating a law against marketing quail, and for one, I am in favor of it. I don't believe in paying a premium to pot-hunters and quail trappers, and they alight in the trees and are in one vagon to-day, and probably not twenty-five of them were shot on the wing. Let us stop this slaughter.

W. H. H.

THE sportsmen hereabout will soon find quail coming into market which bear no signs of having been shot. These are "trapped" birds, and the legitimate sportsmen should see that parties offering them for sale should be arrested and punished.—*Harrisburg (Pa.) Patriot.*

We invite an expression of opinion respecting the scheme to secure the protection of game, an outline of which will be found on our editorial pages.

GAME LAWS IN MAINE.—*Macbus, Me., Nov. 12.*—The article in FOREST AND STREAM signed "Bangor," and its answer, by Everett Smith, Esq., Commissioner Fisheries and Game for Maine, show that sportsmen residing in Maine have something to do the coming winter. Let us be calm and unselfish and make our plans. I will state as near as I am able the wish of the sportsmen in this part of the State. We would like the season for deer to open Sept. 1, and close the same as at present for this reason. Temptation is strong to break the law when by accident a deer is seen while shooting ducks, grouse, etc., besides it is impossible for wardens to prevent gunners killing them when the woods are full of hunters, nor does it seem reasonable that they should not, as they are in good condition this year, and, moreover, the number killed would be small. Yet, if "no tinkering" is the wish, we yield and go in for what we have, only plan for the future enforcement of what we now have. We are decided that the dog clause is proper and needs no change, that pot-hunting is a nuisance and an injury not only to the community, but to the hunters themselves, as the money that would be paid for guides, transportation and supplies would much more than balance that received for the game now killed. Game itself is a nuisance, but its pursuit a still greater one to a large portion of our hard-worked business men, besides its importance is growing rapidly in the opinion of our best medical men, who are now giving their attention to the diseases of the brain, its treatment both preventive and curative, and as a general rule this class who need the rest and change, that Maine forests and lakes can give, are abundantly able and willing to pay liberally for the same—examples: Hageley and Moosehead. I believe nothing short of a law to prevent the pot-hunters, and the special wardens, to be paid by the State and under the direc-

tion of Commissioners, also detective service for special work when Commissioners deem proper, with an appropriation to cover expenses.

I am over fifty years of age, but still enjoy the woods. Never killed a deer in my life, but expect I shall every time I shoulder my rifle. I spent the first week in October with a small party at the Mopang. I need not tell you that we all decided to spend two next year.

Let us hear from others.

OLD TUG.

GAME IN PENNSYLVANIA.—*The Harrisburg, Pa., Patriot* has this to say about the game in that vicinity:—George Keller, a well-known Hummelstown successful wing-shooter, is slathering the quail at a lively rate down the Lebanon valley. The pheasant tribe is beginning to be thinned out pretty well on the chestnut ridge, between Hummelstown and the ridge back of Campbelltown. Mr. William F. Lewis, of Reading, a famous sportsman, is playing havoc with the ducks and other game in the vicinity of Millersburg. He is the guest of Mr. Roland Freck, the postmaster at that place, and intends to remain in the valley a full week. An up-town crack shot got into a covey of birds on the Jonestown road yesterday with a young water dog and succeeded in bagging a five out of a flock of eight old and very plump birds. A party of hunters from Harrisburg, among whom was our old friend W. B. Meetch, Esq., Register of Wills, we learn, shot fourteen wild turkeys in one day on a trip to Clark's valley recently, "and it was a poor day at that for wild turkey shooting."—*Liquors Register.* The Nimrods residing along the base of Lohr's, Kittatiny and Peter's mountains, and in Powell's, Rohrer's, Stony Creek and other valleys, report quail, grouse and wild turkeys scarcer than in former years. The old foresters along the several mountains north of the city attribute the scarcity of game to the destructive fires on the mountains and hillsides late last spring, when, they aver, all kinds of game were driven off and their haunts destroyed, and that the young of grouse, woodcock and other species of game were killed to a considerable extent.

TRAPPING IN ARKANSAS.—*West Point, White County, Nov. 18.*—As the fur season approaches, the enthusiastic trapper naturally thinks of his traps, and if possible, secures a good operation, then is soon off for a winter's sport. His feelings are often so eager to get into the woods that he would not mind sparing a few weeks from the record of time. But to the point. My campaigning the present season will be confined to the western portion of the White River swamp, wherein, owing to its natural features, mink, coon, skunk, opossum and a limited number of other animals, the good sportsman, these animals enjoy here are sufficient to secure them from the molestations of intruders, unless a little steel trap warfare is waged, as the overflow does not admit settlers and the country is comprised of almost impenetrable cypress brakes and heavily timbered ridge lands. These brakes afford them splendid facilities for denning and safe retreats in time of danger. Coon and mink seem quite abundant, and by good work one could make it very profitable in taking them alone. An occasional otter might be captured if the waters of the small lakes, creeks and sloughs were deep and free of logs and brush, and no log here. It must not be understood that there are no beavers here, for in the eastern part—across the river—of these bottoms large families can be found, but this probably includes the valuable part of the furrier's fauna. Furs taken in this locality before the middle of November seldom show prime, so the trapper must confine himself to nature's prescribed limit of about four months. The success that has crowned the efforts of the writer as an amateur trapper so far is exceedingly favorable, and I doubt not that in these woods could fare profitably. Should any of the trappers, or hunters have inclinations towards these haunts we are willing to furnish them any information in our power and extend to them a hand of welcome should they venture.

WALTER D. CHILDRESS.

DETROIT.—*Nov. 19.* A merry party of hunters consisting of Messrs. Murray and Pierce, of Niagara Falls; Poole, of Buffalo; Hill, of New York; Moore, of Toledo, and E. H. Gillman and John E. Long of Detroit made this a glorious day for the sportsmen of this city. The party was out for fox chase, and about 9 o'clock this morning the party crossed the river into Canada for the purpose of a day's English enjoyment. At Windsor they were joined by a party of Canadian Nimrods, took hacks for the real starting point—Chaffell's—about 6 miles down the river. Arrived there deer tracks were discovered, and there was much rejoicing at the unexpected doubling of the promised sport. The day was simply magnificent. Chaffell's dog Harkaway was the first to give tongue, the remainder of the pack took up and away went everybody in hot and eager chase. Within an hour a deer was brought to bay and shot by the jolly Murray, Mr. Poole and Pierce rushed in and captured the head as a trophy. At 11 o'clock Gillman and Long started a fox, and after a long chase he was laid out by a shot by Mr. Hill, the New Yorker, who will take the brush home. The party arrived here about 7 o'clock, and as I write in sound of their voices and the clinking lemonade glasses, I hear many an encouraging fragment of the recital of the day's doings. While in Windsor I noticed a quartette of unimpeachable, pure-blooded Dandy Dimonts, the property of Alex. Crawford, a well-known amateur fancier. The little fellows were cap-tivatingly cute and drew a big audience wherever they went prancing along after their proud any happy owner. G. P. G.

A NEW GAME PROTECTIVE SOCIETY.—*New York, November, 1880.*—We hope you will give the following communication your favorable consideration, and we earnestly appeal to you to join us in our endeavors to put down poaching. The "Game Protective Society for New York and Vicinity" is organized for the protection of game (including game fish) and insectivorous birds, and to put down poaching of every description in the vicinity of New York. During the months of September and October particularly, the country is overrun with gunners killing everything in the shape of a bird, and the trains are crowded with the city and its suburbs. We propose to have cards printed giving a list of game seasons and the fines also, offering a reward of at least \$25, payable on conviction of the offender, provided the penalty exceeds the reward. These cards to be posted in all the different stations, stores, post offices, etc., and in the baggage and smoking cars of the roads running out of New York, L. I. City, Jersey City, etc. We also shall endeavor to stop the sending of snared and trapped game to the city, and to every thing we can—with the aid of the proper authorities—to arrest and punish poachers. Not only sportsmen but farmers

"Rex," owned by Mr. F. H. Fuller, and which he, "Ruffed Grouse," is breaking, when he states that "Rex" is a pure Laverack by Lathrop's "Dick," out of Lathrop's "Luna." "Ruffed Grouse" ought to know that there is not a drop of Laverack blood in "Rex" or any of his ancestors. "Rex" is by my "Dick" out of my "Luna," and is a wonderfully promising pup, but dog men who know "Dick" and his pedigree will smile indeed to hear him called a Laverack. Every one well posted knows that the number of "pure Laveracks" in this country can almost be counted on the fingers. "Dick" and "Luna" are pure natives, and I hope "Ruffed Grouse" or any one else writing about my dogs, will never hereafter undertake, either through ignorance or perversion, to "turn away the current of their blood." E. H. LATHROP.

[From a Staff Correspondent.]

THE NATIONAL FIELD TRIALS.

FOUR FOR ALL STAKES

\$500. \$250 to first; \$150 to second; \$100 to third. \$10 forfeit; \$15 additional for starters; closed Nov. 15th, 1890. The drawing was as follows:

- J. J. Snellberg's Thunder against A. H. Moore's La Guy.
- A. H. Moore's Luna May against J. H. Whitman's Pride.
- J. R. Stacey's Helton III. against P. H. Bryson's Gladstone.
- D. C. Sanborn's Count Noble against J. R. Henrick's Skip.
- J. R. Henrick's King Dash against A. Lansing's Max Barloway.
- Montview Kennel Club's Lincoln against A. H. Moore's Count Fred.
- A. H. Moore's Lass o' Gowrie a bye.
- L. D. Rumsey's Bella withdrawn.

VINCENNES, Ind., Nov. 18.—At a meeting called to-night on account of snow, six inches having fallen and now lying on the ground, the trials were called off.

EASTERN FIELD TRIALS.

THE second annual field trials given by the Eastern Field Trials Club will begin at Robin's Island next Monday morning. The ground, as we have already stated, has been well stocked with birds, and there is little reason to apprehend any trouble on that score. The list of entries is a large one, including many of the crack dogs of the country, and should the weather be propitious there is every prospect of a good week's work.

Several extra prizes have been secured by the club, and to the first prize, already assigned to each stake, the following are added: Nursery, 2,000 Winchester shells; puppy, English gun case; all-aged, a Fox gun; brace, an arm-chair. A silver cup will be given for the best pointer.

The entries for each stake will remain open until the evening previous to the day upon which it is advertised to be run; and the stakes will be in the order named last week.

Paymaster L. H. Billings having been, by reason of his official duties, compelled to decline to act as one of the judges, his place will be filled by another, elected by the committee in the several stakes. Mr. F. N. Hall will serve as official scorer. The club will take a special train from Flatbush avenue, Brooklyn, at 8 o'clock on the day previous to the opening of the trials. The route to Robin's Island is via Long Island Railroad to Cutchogue.

Trains leave Hunter's Point for Cutchogue daily at 8 A. M., four hours' ride; and 3:30 P. M., a ride of three hours; fare, round trip \$4.35. Stage and ferry from Cutchogue.

THE COCKER CLUB.—Nov. 21.—Editor Forest and Stream: In last week's issue of your correspondent, "Leann," asks me to accept the secretaryship of the embryo Cocker Club, to which request I gladly accede. My friends know me well enough to know that I am willing to do anything in my power to forward the interests of my favorite breed, and it is with great pleasure that I note the intended formation of this club. Our friend "Leann," myself and two or three others, have long thought such a step necessary, and I hope that every person interested in this breed—whether owning specimens or not—will join us in our attempts to forward its interests. A membership of upwards of fifty is anticipated, but I hope that our anticipations will fall far short of the reality. "Leann" has put the objects and purposes of the club so plainly before your readers that there is nothing for me to add now. Intended members will oblige by communicating with me, when I will furnish them with full particulars. GEO. D. MACDOUTGALL.

1,182 Chestnut St., Elizabeth, N. J.

THE DOG POUND.—The dog pound was officially closed Saturday. During the season there were received in that institution 8,655 canines, of which 8,513 were drowned and 142 redeemed, or released by order of the Mayor. The amount received for the redemption of dogs was \$252. The amount realized from the granting of dog licenses from the 1st of January to November 1 of this year is \$6,115. The total amount paid to the city for dog licenses since 1877, when the ordinance first went into force, is \$43,200.

THE SETTER.

[Reprinted with the express permission of the Author and through the courtesy of his publishers, Messrs. Cassell, Petter, Galpin & Co., New York, from Yero Shaw's "Book of the Dog."]

WE are decidedly of the opinion that field trials have done much toward improving sporting dogs, and hope to see them more extensively held all over the country. They have in some degree, if not perfectly, the merit of combining the element of public competition with those practical tests so desirable in judging of sporting dogs. In these field trials the setters have hitherto managed to hold their own uncommonly well, and up to the year 1880 no pointer has succeeded in winning the Grand Challenge Cup which is given by the Kennel Club to be run for annually by dogs belonging to its members. Any member may run any dog he chooses, either pointer or setter, and it was decided when the cup was first offered that it should become the property of any member who should be fortunate enough to win it three times, but not necessarily in succession, or with the same dog. To the astonishment of the sporting world Mr. G. De Landre Macdonald has accomplished the feat with Ranger, a black-and-white setter. This pure dog, though

not himself a perfect model of beauty, has by carrying off the Challenge Cup upon three occasions stamped himself as the setter of the day, and has moreover shown what is behind him in the matter of pedigree by begetting many first-class specimens of the breed.*

With reference to Ranger's marvellous behavior in the field, we extract the following from a report of the field trials which appeared in *Whos Who*, *Journal*, April 29th, 1879.

"He made what is so much to the public taste at these trials—a sensation point. When running down a large grass meadow with Dorkie he rushed with marvellous speed to the bottom, against which appeared a large embankment. The dog suddenly found himself hurled by the impetus of his going into the midst of a twelve-foot river that ran between the embankment and the grass field in which he was running. The impetus with which he went threw him to the opposite side. Crawling up the bank he dashed with the shock, he scented some birds, and immediately coming to life again, dropped. The birds then rising he plunged back into the river, swam across, and shook himself in the face of the judges and spectators. Anything more unique or sensational in the matter of field trials has not been witnessed before, except when he won the all-aged stake at the Kennel Club field trials, when, rushing down the hill, he suddenly winded birds, and stopped, and the impetus of his going caused him to make a somersault in the air, when he landed on his back, and as stiff as starch. His four legs were seen in the air, and his neck and head turned round in the direction where the birds were soon put up about a foot from his nose."

Ranger, in addition to his Challenge Cup triumphs has won the following stakes: Reynold Stakes, Shrewsbury, 1874; Champion Cup, Shrewsbury, 1877; Shrewsbury Stakes 1877; Hawkestone Stakes, Shrewsbury, 1879; East of England Stakes, Ipswich, 1879; Trechill Stakes, Devon and Cornwall, 1878. Such performance, even unaccompanied by the fact that he has won the Challenge Cup outright, stamp Ranger as undoubtedly the best dog of his breed which has hitherto appeared.

To recommend the setter as a companion dog to the non-sporting philo-kun may be to invite a sneer from many a knight of the trigger, but nevertheless there is much to be said in favor of these dogs in the character of mere companions. There is no more elegant dog than the setter, the outlines of a well-formed specimen are eminently beautiful, and his every movement most graceful. The coat is beautifully soft and rich, the feathers especially being of a fine silky texture, and the colors and distribution of them generally striking and picturesque, as they are soft, refined and lovely. In intelligence the setter has few equals, so that he soon accommodates himself to circumstances, and is so easy of control that he readily becomes a companion that can thoroughly be trusted, for his intelligence is great, and he seems to think for himself, and make the pleasure of his owner his sole delight. In temper they are almost invariably reliable, and their affections become deep and lasting. And added to all these qualities there is an air of refinement and superiority about him, inherited from a long line of blue-blooded ancestors, that commands him to all.

Those who keep but few setters to shoot over themselves should never fail to make friends and constant companions of them; the mutual understanding and trust arising from this double the usefulness of the specimen in the possession of his owner, and adds to his own pleasure.

We had Mr. Macdonald's Ranger with us while Mr. Barley was sketching him, and although we met as strangers we were soon friends, and parted we finally bade with mutual regret. Never have we seen a dog who so readily accommodated himself to circumstances—he seemed at once to be as much at home in London as he is in the stubble or the heather, and took his seat in a hansom cab as naturally as though to the manner born.

One word of caution only in respect to keeping setters as companions. We should always advise having them broken to gauge, although there may be no prospect of using them; because if unbroken dogs were bred from an unbroken line, while their beauty and general intelligence might be sustained, they would lose the aptitude for their natural work.

As stated at the commencement of this article, it is an unquestionable fact that, whatever the source was from which the modern English setter sprung, there are several distinct varieties of the breed at the present time. They are themselves offshoots of older types, which in their turn originated from the setting dog, either by breeding and selection, or to the judicious admixture of foreign blood. It may therefore be as well to draw attention to some of the most famous of the old breeds, as well as make allusion to the most fashionable of the modern ones, before proceeding further with the subject.

Reference has already been made to the Welsh setter, a breed now practically extinct, and whose dog is so greatly to be deplored that supreme efforts should be made to restore it before all hopes of doing so are vain. Mr. William Lord, of Fron Goch Hall, Montgomeryshire, who has before been quoted in this chapter, has kindly given us some valuable information concerning this variety of setter, which is in part as follows: The coat of the Welsh or Llandilo setter, or at all events of pure-bred ones, is as curly as the jacket of a Cotswold sheep, and not only is it curly, but it is hard in texture, and has unlike that of a modern fashionable setter as it is possible to imagine. The color is usually white, with occasionally a lemon-colored patch or two about the head and ears. Many, however, are pure white, and it is unusual not to find several whelps in every litter possessed of one or two pearl eyes. Their heads are longer in proportion to their size and not so refined looking as those of the English setter. Stems are curly and clubbed, with no fringe on them, and the tail swells out in shape somewhat like a lion's tail. This breed is more useful than any spaniel, for it is smart, handy, with an excellent nose, and can find with tolerable certainty at the moderate pace it goes. It usually has the habit of beating close to you and is not too fast, being particularly clever at cocks and snipe, which they are no more likely to miss than is a spaniel. With so much to recommend them, we cannot help repeating that this is a breed well worth saving from extinction, especially as it is so hardy and far less liable to disease than the modern fashionable dog. Some excellent specimens of this variety have been in the hands of Mr. Charles Beck, of Upton Priory, Macclesfield, and he said that they stood hard and briery dingles, when he worked them in Wales, better than any breed he could procure.

There was also a liver-and-white strain of setter which was

*The pedigrees of Ranger III. and of Ranger are given at length by Mr. Shaw.

well known in the north of England, especially in the Carlisle district. Though this dog was coarse and lumbering, it has been argued, and as often denied, that the famous Laverack blood is tinged with that of this variety. However, this will be more fully referred to almost immediately, when the Laveracks are touched upon.

Another curious strain, jet-black Welsh setters is now lost, and gone forever. It was a blood that was to be found in many parts of the Principality, and as a strain was second to none. Unfortunately, though jealously guarded by its owners, their interest in it gradually lessened, and it finally has disappeared entirely.

The Anglesea setter, as it was once called, did not spring, as might be supposed, from the island of that name, but from Beaudesert, the residence of the Marquis of Anglesea, where it was carefully treasured. They were of a character a light, active, very narrow breed of dog, with no character, though deep in ribs. They were rather leggy and possessed the habit of standing with their fore-legs and feet close together. This breed of dog was constitutionally delicate, but as long as they stayed, showed great pace in the field. In color they were mostly black-white-and-tan, and in coat, though not so smooth and flat as a modern setter, the Angleseas were not nearly so curly as the Welshmen described above.

To arrive more rapidly at the leading strains in 1880, we now come to the magic name of Edward Laverack, a gentleman who has done more to bring this setter in all his glory before the public than any other has ever done or is likely to do. Mr. Laverack, who was an ardent sportsman, for half a century was engaged in improving the English setter, and with most flattering results. The corner-stone of his breeding-stable was a pair he first obtained from a clergyman named Harrison, who resided in the neighborhood of Carlisle. That he conscientiously followed the principles of strict in-breeding is amply proved by a reference to the pedigree table of Laverack, where it will be observed that all Mr. Laverack's best blood is represented on the one side; and the success of his system is clearly demonstrated by the position his strain occupies in the estimation of modern setter breeders. In short, most of the leading strains are either pure Laveracks, or else they partake largely of the Laverack blood. The formation of the Laverack setter, to quote his own words, is as follows:

"Head long and light, not snake-headed or flewed, but a sufficiency of lip; remarkable for being very strong in the jaws; muzzle not too deep, wide, and not too wide; round the shoulders, carrying the breadth of back to where the tail is set on; immensely strong across the loins; shoulders very slanting or oblique; particularly short from the shoulders to where the hind-quarters meet. A setter should not rise or be too upright in the shoulder, but level and broad; tail well set on in a line with the back, rather drooping, scimitar-shaped, and with plenty of flag. Legs remarkably short, and very short from hock to foot; feet close and compact, thighs particularly well bent or crooked, well placed and close under the body of the animal, not wide or straggling."

"Color black, or blue-and-white ticked; coat long, soft and silky in texture; eyes soft, mild and intelligent, of a dark hazel color; ears low set on and close to the head, giving a round development to the skull. There is another variety of the same strain called the lemon-and-white Beltons, exactly the same breed and blood. These are marked strongly in the Blues, except being spotted all through with lemon-color instead of blue, and precisely of the same form and characteristics as the former, save in the color of the coat."

These words of Mr. Edward Laverack must surely be treasured by setter breeders, and the only unsatisfactory part in them to our mind is the total absence of any allusion to liver-color. We cannot see how he can reconcile himself to ignore all reference to this liver-color since, in the following letter to Mr. Rothwell, an old friend and fellow-breeder, he distinctly admits that there is a strong dash of liver blood in the Laverack setter. The letter referred to runs as follows:

"[Copy.] "Broccoli Cottage," "Whitchurch, Shropshire." "DEAR ROTHWELL: I am glad to hear your bitch has given birth; save me a Blue. All five are true bred, and all take after the sire, Blue Prince. The liver-and-white will be quite as handsome as the blue. He strains are true, and I am sure of the border, a liver-and-white, he strains back for thirty years to a change of blood I once introduced—the pure old Edward Castle breed—County Cumberland liver-and-white, quite as pure and as handsome as the blue. You may have heard him speak of the handsmest whelp he ever saw, viz., 'Blot.' He was the first of a clipper. Pride's dam was my old blue-and-white, with tan cheeks and eyebrows. Why I reserved Pride was to breed back with him and my Blues. He is invaluable, as by him I can carry on the liver blood. I have a demand for him, and I will sell him for ten guineas, but they are the best, and I guarantee all I send bred by me. Yours truly, E. LAVERACK."

May 23, 1874." There is a possibility that Mr. Laverack, knowingly or otherwise, had introduced some of the blood of the liver-colored setters we have alluded to as being in the neighborhood of Carlisle. This is a matter of popular name, we understand, and therefore it might not have been worth his while to make a special reference to it. But be this as it may, one thing is very evident from the letter, and that is that Mr. Rothwell, who bred many dogs for Mr. Laverack himself, was unaware of any such taint, or this letter would not have been written. Its present publication may be a consolation to breeders of this kind of dog, as the appearance of a liver-colored whelp will convince an owner who has read these lines that it is not necessarily a taint in the pureness of its pedigree as a Laverack. There could in fact be a great deal said upon this subject of the liver color, which Mr. Laverack here remarks upon as being likely to appear now and then in pure-bred dogs of his strain. A tendency to throw back is of course inevitable in every breed of animal, and it is greatly to be regretted that in his work Mr. Laverack threw no light upon the origin of his breed. In fact, in his description of the setter, he only alludes, in referring to his origin, to black, or blue, and lemon-ticked ones. This reference to the part of Mr. Laverack's work seems to imply that, though he did not attempt to deny the fact that there was liver blood somewhere in his strain, he was not particularly anxious that this should be generally known, and consequently kept even his *Fidus Aethiops*, Mr. Rothwell, in the dark about it until some puppies of the color appeared in his breeding operations, when he hastened to assure the latter gentleman that such an event was by no means impossible.

It would appear, however, only from the above letter, but from other which passed between Messrs. Laverack and Rothwell, and which subsequently came into our hands, that the latter gentleman, who appears to have had the free use of any of Mr. Laverack's stud dogs, was in the habit of giving Mr. Laverack puppies as the latter required them; and also that the great breeder himself was kind enough to sell Miss Rothwell's whelps for her. We do not consider ourselves that there is any harm in such a thing being done; but the

Brownson.....	19	21	17	18	19	22	19
Barber.....	—	19	21	18	16	21	20
Wagner.....	19	17	18	14	16	22	18
Bacon.....	20	21	20	20	21	17	17
Perry.....	22	19	19	19	19	16	22
Watson.....	19	18	19	21	14	18	15
Tyler.....	21	20	20	19	17	19	22

Ricehead.....	18	19	17	17	21	19	17
Beckwith.....	29	14	8	8	19	22	22
Rice.....	22	19	29	50	19	22	22
Rawdon.....	18	19	19	19	19	22	22

On the second day the scores ran:

Ricehead.....	21	18	24	29	22	18	41
Beckwith.....	29	14	8	19	22	22	31
Waterman.....	29	14	18	18	19	22	31
Barber.....	15	19	15	20	22	21	40
Rawdon.....	17	17	22	19	17	20	42
Barber.....	15	21	22	19	11	21	41
Tyler.....	15	23	21	21	19	22	41
Wray.....	15	21	18	19	17	21	40
Griffin.....	15	19	19	17	21	21	40

Special prize for best aggregate on the day's shooting was won by Tyler.

Ricehead.....	143	Barber.....	145
Beckwith.....	129	Tyler.....	131
Waterman.....	141	Perry.....	124
Rawdon.....	124	Barber.....	124

The weather throughout the shooting was unfavorable, but in spite of the wind, which at times diverged the bullets from six to eight inches from their true line of flight, the skill of the marksmen overcame it in a great degree, and the scores made are the best ever recorded. A year ago the highest average was eighteen, the honors going to Mr. Bacon, of Jamestown, New York. It will be seen that there is a marked improvement in the scores made last week. The following is the summary of the scores of the marksmen who shot out the matches in which they entered without withdrawing after several bad shots, as was the case in a number of instances:

	Shots.	Score.	Average.
N. B. Tyler.....	20	45	2.25
R. C. Rice.....	24	47	1.96
Wm. Brownson.....	24	46	1.92
W. A. Hichard.....	24	45	1.88
J. L. Bacon.....	15	29	1.93
H. V. Perry.....	15	29	1.93
H. Warner.....	15	28	1.87
E. Rawdon.....	19	34	1.79
S. Child.....	4	6	1.50

Pet Barber shot in nineteen matches, three of which were drawn. His average on the balance was 20 1-16, which would have been reduced had his full score been shot out. The honors of the tournament belong to Mr. Tyler, who won the special prize on Thursday, besides making the highest aggregate count and average shooting in all the matches. His competitors were among the most noted experts in this section of the country, who did their level best to change the result without avail, and a number drew out of the tournament at the end of the second day, thus virtually confessing that the game was too fast to be agreeable.

HAMILTON, Ont., Nov. 13.—The annual matches of the Victoria Rifle Club took place to-day on the club ranges. The weather was more favorable than might have been anticipated, although at times the light was difficult for accurate sighting. The attendance of competitors was very fair. Next year it is intended to try and secure ranges on the line of the street railway, where four targets at 800, 500 and 1,000 yards can be had. This would enable the club not only to hold first-class matches, open to the province or Dominion, but would also make it possible to hold the return international match with the Amateur Rifle Club of New York, a most desirable end to have in view.

As usual the matches were divided into the Snider and small-bore series, the former at 200, 500 and 600 yards, and the latter at 900 and 1,000 yards. In the former, A. Miller, of the Thirteenth Battalion, came out easily first with the excellent score of 89, winning the Snider rifle presented by Lieut. Col. Gibson, and the Snider gold medal for the year, which last year was won by Col. Gibson with a score of 92.

In the small-bore match the competition was keen and the score very fine. Mr. F. Schwarz made 96 out of a possible 100, being a slightly better score than Col. Gibson's 90 out of a possible 105 last year. Mr. Schwarz put together in his ten shots at 1,000 yards one inner and nine consecutive bullseyes, making 49 out of a possible 50. He was warmly congratulated by his old fellow shots on being announced as the winner of the small-bore medal for the year. Of the nine small-bore scores given below, all but two were made with the Remington Creamore rifle, and both the medals were awarded to shooters with the Remington arm.

The Dominion Rifle Association and Ontario Rifle Association medals, which the club usually award to the highest grand aggregate of the whole day's shooting, were taken respectively by Mr. James Adam and Mr. Schwarz. The prizes were partly in kind and partly in cash.

The list of prize winners is as follows:

	Snider.	200 Yards.	500 Yards.	600 Yards.
A. Miller.....	89	22	31	26-89
G. Murre.....	88	29	28	25-84
B. Mitchell.....	87	29	28	25-84
L. Morris.....	86	29	27	25-83
L. Col. Gibson.....	86	27	25	25-81
H. Burrows.....	85	29	27	25-81
J. Adams.....	84	29	27	25-81
A. Paine.....	84	29	27	25-81
W. Mitchell.....	83	29	27	25-81
J. Mitchell.....	82	29	27	25-81
Jos. Mason.....	81	29	27	25-81
S. Schmitt.....	80	29	27	25-81
G. G. Gwyn.....	80	29	27	25-81
Lieut. J. Scott.....	79	29	27	25-81
W. Mitchell.....	78	29	27	25-81
G. Margolis.....	77	29	27	25-81
W. O. Reid.....	75	29	27	25-81
W. Graham.....	74	29	27	25-81

	900	1,000	Grand Aggregate.
F. Schwarz.....	47	49-26	D. Mitchell..... 45-83
G. Margolis.....	46	47-26	W. A. Hichard..... 45-83
J. Adams.....	47	46-26	G. Murre..... 45-81
G. G. Gwyn.....	46	45-27	M. Mitchell..... 45-76
A. Paine.....	46	45-27	

	500	600	900	1,000	Y.
J. Adams.....	29	30	41	46-153	D. R. A. McNeil.
F. Schwarz.....	24	31	41	49-175	O. R. A. McNeil.

SCHUTZEN NOTES.

To fulfill the wishes of many of your subscribers, I reported from time to time the different Schutzen Corps and their winner and fall shooting festivals. Since these festivals have been closed (with the exception of that of the Jersey Schutzen Corps, which will be held on Thanksgiving in the Schutzen Park, Union Hill)

I feel myself duty bound to follow the Schutzen Corps to their winter festivals in the ball room. Saturday, the 20th of Nov., the General Herzog Co. No. 31 of the Germania Schutzen Bund, of which Jacob Neeshack (the well known Plattdeutsche Schutzen) is the Capt. held their second annual ball at Weber's Hotel, Hoboken, which was indeed a grand success in every respect. Schutzen from different parts, as New York, Brooklyn, Great Hill, Jersey City Heights and Jersey City were present. Great credit is due to the different committees, and especially to the Captain.

SCHUTZEN CORPS.—The annual ball of the New York Schutzen Corps will be held at Beethoven hall, Wednesday evening, December 1. The event is looked forward to with many pleasant anticipations.

—The greatest nourishing tonic, appetizer, strengthener and curative on earth—Hop Bitters.

Dachling and Canoeing.

THE ANTHRACITE PLASIO.

THERE is no longer the slightest probability that any one in America will build a Perkins boiler, much less the peculiar clumsy contrivance with an extra cylinder introduced to do away with a gland, known as the Perkins engine. It would therefore be merely wasting words over a dead issue to deal with the matter any further than to cite the Perkins Company and their agents before the bar of public opinion. When the Anthracite arrived in America years it was given out that her consumption of fuel was one pound of oil per horse power per hour, and that the strength of this statement that the Perkins system obtained a vast deal of free advertising from the unprofessional press, and among those journals which ought to have known better than repeat the brazen pretensions of the Anthracite people. For some years the great was the only one which was independent with the courage to stamp the statements made concerning her economy as a common falsehood. We quoted the English engineering journals in proof, and took several contemporaries to task for the manner in which they elaborated their own views with the aid of the Perkins Company and their agents. The Anthracite's successful crawling across the ocean and back proves nothing for her engines or boiler, it goes to show simply that a hundred-ton vessel need not founder every time she goes to sea, something the world had known ever since the *Arcton* sailed from New York for London, blow up, from which we arrive at the conclusion that wrought-iron pipe will stand more than 500 pounds to the square inch, information which could have been equally as well procured from the nearest plumber or gasfitter. The sole object for which the Anthracite was sent out was to convince the engineering world—no greenboilers—that the Perkins boiler was economical in the generation of steam, that, in the language of her engine driver, she consumed less than half as much coal as the ordinary tubular boiler. That is the whole issue of the Perkins boiler, and that is the only point of interest in the whole matter. How effectually the Anthracite belied the whole issue is told about her, the publication of the report of the Government Board of Engineers shows in the most plain and simple manner. The *Arcton* consumed 1 lb. of steam per horse power per hour, and the Perkins boiler consumed 2 1/2 lbs. of coal per horse power per hour, a consumption which proves her to be a total failure from an economical point of view and proof absolute of the falsity of the reports given out concerning her. She consumed as much coal as an ordinary tubular boiler, and she consumed more coal than the least economic arrangements, and she consumed more coal than many an ordinary trading steamer or tugboat in our harbor. Such is the truth as developed by the experimental trials at the Brooklyn Navy Yard. Had the Perkins people not made themselves laughing stocks among engineers and shipbuilders, claims at the outset, the results obtained might be looked upon as ordinary or fair, such as would be shown by any first-class boiler worked with a view to the greatest economy. In the light of the monstrous claims made for the Perkins boiler, the results are a failure. How to account for the wide difference between the substantiated results made in America, and the unsubstantiated reports of Dr. Brownell and the Perkins Co. in England upon any other supposition than that of wilful deception, we are willing to let the reader judge for his own satisfaction. The Board of Naval Engineers attach this very careful and non-committal paragraph to the close of their report:

"As economy, its superiority to the systems now in vogue, and its future career, which is expected by experts to be of the record and results of the trial will form an item."

As the experience with the Perkins boiler extends already over a long number of years, and as it has failed to receive the endorsement of practical steam users or of the engineering fraternity, it is not likely that the probable extent of its future career "can be readily surmised."

MINIATURE YACHTING.

Editor Forest and Stream: The healthful and delightful sport of miniature yachting is fast growing in popularity in this country, and assuming proportions which already compel the members of the Metropolitan Miniature Y. C. to go to tide-water in order to sail in the races and regattas, as the small lake is no longer regarded as the proper place for the sport. It is too small for racing or testing the speed of the different models. The supreme delight of the sport can only be known by those who participate in it. There are, however, a great many who never go to tide-water to sail, which is greatly on account of the inferiority of their boats, and in some cases owing to the shallow models, which are wholly unsuited to tide-water sailing. Speaking of shallow models reminds me of the innumerable trials I have made with them, the multiplicity of models I have made, and the little success I have had in increasing the speed of any of them until at last I made an entire departure from this kind, and have, by repeated experiments, found the following dimensions about as near right for sea-going vessels as my varied experience has proven: Divide the keel into four parts, two beam, and half the beam for the keel. When I speak of the keel, I mean the part which would be the keel of a large vessel, and not the "false keel" which we add to our small craft, giving the model an easy bilge, with from 32 to 35 deg. dead-rise, a long floor and an easy run; width of deck line 45 to 50 per cent, at bow and 50 per cent, at stern; of greatest beam, guard against any flat surfaces, and make all lines either concave or convex. I do not, however, wish it to be understood that the above are the only dimensions upon which a sea-going vessel can be modeled. Limited departures from the above can be made with success either in increase or decrease of any of the measurements, which, of course, depends upon the uses to which the vessel is to be put and the waters in which she is to sail. My experiments have, however, proven to me one matter more important than the mere speed of the vessel for the purpose of racing, as a delightful pastime and healthful recreation, which is the modeling and building them for the purpose of constructing large vessels from them, which would save a great deal of money in experimenting on the large vessels built from half models, which convey no accurate information, either of shape or of the

correct position of mast or spars, the cut of the sails, or anything else about them, either above the water-line or below it, until after she has been launched and sailed on a larger vessel, and then a trial has been found not to be the fast boat which the owner anticipated. Owner and builder are taken aback, and then follow the multitudinous suggestions, and the experimental alterations begin—probably for beneficial results in the case of the other boats which follow, and so on, until at last the speed which can be got out of her has been attained. The builder, of course, is not the loser by this, either in pocket or reputation, as he is a man who understands his business so far as he has learned it so he is happy. But the owner, who has paid for the boat, has lost a great deal of money, as he finds that the boat has cost him from \$15,000 to \$20,000 more than he calculated, and is therefore in the best of humor, and in many cases is ready to sell her for less than she cost him, and particularly so when the expert tells her she has not come up to his expectations. Now, I predict that if any better method of constructing vessels than the present one is not adopted inside of fifty years, yachting will be a thing of the past. I have experimented enough to know that building the miniature first, then trying her in twenty yards and some—not alone, but by comparison with others which are the exact models of known fast boats,—spared and weighted the same, is the best way of acquiring an estimate of the large yacht's probable performance. When the time comes that this will be done, then you will have fast and sturdy boats at less cost than through the present system. Experiments with small or miniature craft cost a mere trifle when compared with those executed on large vessels. At present it is no wonder that yachtsmen become fired in mind as well as purse, sell their boats and order new ones, and then find that they have not the article I will treat the matter more fully, as well as give some hints in regard to rigging large craft, which will save a great deal of labor in sailing.

100 East 84th St., E. C. Gray, N. Y.

The communication of Mr. Gray is doubly interesting for the deductions in model cited, and for the proposition to make use of the miniature yacht as a subject of experiment before risking heavy sums in their reproduction on a large scale. The observations on model made are accepted as of the utmost value, and we are inclined to lay much store upon the conclusions Mr. Gray has come to. His experience at once more extended and his deductions much more accurate than those any builder or owner of large yachts can offer, for the reason that he builds a score of yachts to order and sails competitive matches in much greater number under all possible variations of wind and weather, rain, fog and ballasting. Granting for the moment that miniature yachts, as we should prefer to call them, model yachts, can be taken as accurate exponents of large ones, their performance, no one can logically rate lightly the conclusions arrived at from extensive experience with the models. Mr. Gray started out, as mine yachtsmen out of ten in America, strongly prepossessed in favor of the revealing flat-iron type. By varying the proportions of length, depth and beam he soon found that the light draft and wide boat by no means exhibited the highest speed attainable and was certainly not to be considered a satisfactory performer in rough water. By experiment he was induced to modify prevailing forms, more and more, until finally led into the proportions mentioned in his letter. These so closely coincide with the observations we have made ourselves during years of sailing and study of vessels of all types, and they so thoroughly corroborate the deductions of naval science that we place Mr. Gray's experiments before the public as further proof in favor of a moderate form. We believe, with him, that considerably less beam and more depth than the custom will be, is not only permissible, but would lead to more satisfaction for the money invested than now obtained from our smooth water-sailing machines with their lack of accommodation, bad qualities, big rigs and capsizeing proclivities. It will be interesting to observe in the future to what extent the model craft will be looked upon as an index to the qualities of the full size yacht. The important scientific and practical results obtained by the late Mr. Fremont from his experiments upon models of naval vessels lead us to think favorably of the claims Mr. Gray advances concerning small scale prototypes of yachts about to be built.

HOW TO WINDWARD.

In all the recorded races of the Arrow she did not in any one of them have the wind ahead more than one-third of the course. During some of her races she found scarcely any head-wind at all, as was the case in the regatta of the New York Yacht Club, June 9, 1879. As her greatest sailing ground was to the westward, it may be well to give you a sketch of the Cape May Regatta of June 21, 1876, as the wind was dead ahead from Sandy Hook to Cape May. It was quite light with the exception of the last three or four hours, which was a heavy breeze. The wind was as compared with those of her only competitor, the Gracie, the Gracie started from Sandy Hook about 1:30 p. m., seven and a half minutes ahead of Arrow, with wind light. In fifty minutes' sailing, when off Scituate, the Arrow had passed her. This was at the end of the bow and by dead sea sight we kept the Gracie in view to windward. Then it became a matter of anxiety to those on board the Arrow whether the Gracie would keep in shore or out during the night. As we were too far from her to see her lights, we might keep inside or outside of us by getting a different view night pass us. The second proof that our fears were well founded, as about five o'clock in the morning she was discovered five or six miles at sea, and directly ahead of us, as near as we could tell, and just about as near the Cape May lights as we. Then we had to go to work and beat her over again. The wind was still light, and we stood out to sea until we passed a long way to windward of her and nearly ahead of her when we loved and stood in shore. The wind now began to freshen. We stood in until the light breeze began to blow again, and then we stood in with the Gracie's long way astern and to leeward, and as it became a little smoky we could not make her out clearly. We passed the lights on this stretch at 12:30. It was now blowing fresh, and the smoke cleared away so that when the Gracie passed to leeward of us she once more came in sight. We kept the Gracie in view with the aid of glasses until 2h. 12m., when we lost her again before she had passed the lights. The wind was very steady all the morning, so that one boat could not get more than the other, or by the length of the line, which again was short and stout, and twelve minutes in about seven hours of sailing, or nearly fifteen minutes an hour. This is on the supposition that we sighted the Gracie at 5 o'clock A. M., and that she was even with us then, which I believe to be the case. On the way back it got to blowing very fresh, and at about 9 o'clock P. M. we ran into a squall from the north, which lasted but a few minutes, and then we were left between three and four hours without any wind at all, the Gracie running up in the meantime within five hundred yards of us, and then we kept the Gracie in view until she struck into the squall. Finally a light air sprang up from the westward, and we passed Sandy Hook Lights about 6 A. M. next morning, and about 40 minutes ahead of the Gracie. There are two things to be known here, and that is, the Gracie ran much more per hour on the second day of the race than she did on the first. One is that Capt. Starkins would not allow the Arrow to carry more than about half her centre-board until she had passed the Gracie. The other is, that on an average there was about twice as much wind the second day as on the first.

ABOARD THE ARROW.

ruption of wheatfish, which in its turn is said to be a translation of one Indian name. You probably know the fish by one of the names given. We try to use the popular name for all fishes which has the sanction of the greatest number of people, irrespective of locality or what we were taught to call it in boyhood. We have little doubt but what the New York marketmen will, in the next century, force their names for fish upon all the fishermen with whom they deal, and they are extending their range all the time. They have done so in many cases already. Hence our preference for the name given by the old Dutch settlers to the fish in question, as we think it is the one which will eventually be the name from Maine to Florida, or wherever New York market men buy.

Brown Coor, Lamoine, Me.—My gun is a choke bore, 10 gauge, of nine and a quarter pounds weight. 1. How much powder, how much shot, and what size shot shall I use in shooting ducks and coots? 2. What is the proper charge and size of shot in shooting ruffed grouse? 3. With several choke-bore I have found that

aper shells give a much better pattern than metallic shells. this the case with most choke-bore? 4. Are Eley's concentrators good for such a gun as mine? 5. A limited experience has impressed me favorably. 5. How shall I prevent my gun from leading? 6. Would wire cartridges of No. 3 or 4 shot make my gun effective at any greater distance? 7. In using coarse shot is it not necessary that they make perfect layers in order to do the best shooting? 8. Is Ladin & Rand's Orange Lightning powder among the best for my gun? And what size shall I get? I want a clean powder if I can get it. 9. Is not 70 to 75 yards as far as most good guns are sure of a bird? 10. What can I do to keep the rust off my gun? Ans. 1. 4 drs. powder and 1½ ozs. No. 4 shot. 2. 3½ drs. powder and 1½ ozs. No. 9 sh. t. 3. Very likely the wads have shaken up in the metallic shells. 4. We have found that the latter give good results in choke-bore. 4. Yes. 5. You cannot prevent what is commonly called "leading," but it can easily be removed with a wire brush. 6. Yes, if they will easily pass the choke. 7. Yes, if practicable. 8. Yes; a coarse powder for sea shooting. 9.

Yes. 10. Use some rust preventer. Half a dozen are advertised in our columns.

Any subscriber or reader of FOREST AND STREAM in want of any kind of carpetings, oil cloths, rugs, etc., etc., can be sure of fair treatment at the hands of John H. Pray, Sons & Co., Boston. Call or correspond with them, and get their prices before buying. It will pay you to try them.—[Advt.]

PUBLISHER'S DEPARTMENT.

MANGE, Canker in Ear, worst cases cured. Sample mailed for stamp. Hepworth, 298 Madison street, Brooklyn.

HOLABIRD Shooting Stills. Upthegrove & McLellan, Valparaiso, Ind. See advertisement of "Guns to Hire."

No matter what your feelings or ailments is, Hop Bitters will do you good. Prove it.

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GLOVES, UMBRELLAS, UNDERWEAR, &c., &c.
SAMPLES AND CIRCULARS MAILED FREE.

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PLY AND BAIT RODS

of best quality. Six strands from butt to tip.
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EVERY ROD WARRANTED.

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CHARLES L. RITZMANN'S

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TAXIDERMIST SUPPLIES.

Bird Skins. Glass Eyes.
For Stuffed Birds and Animals.
Send Stamp for New and Reduced Price List.

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In-Doors and Out-Doors.

By E. H. LELAND,

ILLUSTRATED.

This is a most charming book and should be in every farm home in the land. It is written in a most captivating style and is so thoroughly familiar with the subjects treated. Every page abounds in valuable hints and suggestions, commensurate in all respects with the value of the volume. It is very handsomely printed on tinted paper, bound in extra cloth, beveled edges, black and gold, and will make a most handsome holiday present or rural friends.

Price, Post-Paid, \$1.50.

ORANGE JUDD COMPANY,
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For Sale.

BIKE FOR SALE.—An English "Harvard Roadster," 52-inch, double hollow forks, suspension saddle, etc. For price and full particulars address W. de RHAM, 24 Fifth Avenue, N. Y.

FOR SALE, Stanchion or Pump Gun, for shooting in Potomac River and Chesapeake Bay. Weight, 135 lbs.; length of barrel, 79 in.; outside diameter of barrel at breech, 3½ in.; diameter of bore, 1½ in.; charge, 30 drs. powder; 2 to 10. Shot 2,000 caps for samples. W. R. SCHAEFER, 61 Elm Street, Boston, Mass.

FOR SALE, 1 very fine Scott breech loader, in perfect order, only used a few times. 12 gauge, 28 inches; cost \$175; price \$75. CONROY, BISSETT & MALLISON, 65 Fulton St., N. Y.

BROOK TROUT EGGS.—A quantity of No. 1 Brook Trout Eggs for sale cheap; ready for shipment from Nov. 25 to Dec. 15. For prices, etc., address at once, BRAINARD & WILLIAMS, Randolph, Cattaraugus Co., N. Y.

A Remington sporting rifle for sale at a great bargain. Length of barrel, 36 in.; caliber, .44; weight, 8½ lbs.; pistol grip, beautiful stock, bench and combination sights; made to order, warranted accurate and as good as new, with full loading kit, canvas case, 60 loaded and 100 unloaded shells. Cost \$62; will sell for \$40, not having any use for it. Address: E. P. Box 618, Lynn, Mass.

50 All Gold, Chrome & LUG Cards, (No. 9 alike), Name on, GOLD, CLINTON BROS., Clintonville, Conn.

Wanted.

TO EXCHANGE, pair Rob Roy canoes, good order sound and light, for B. L. gun, Scott, Greener, or Webber, seven or ten foot, or thoroughbred cat-bait. Address H. CRAIG, Flushing B. O., L. I.

FOR EXCHANGE, Billiard Table with outfit for breech-loading shot gun or thoroughbred setter dog. E. F. T., Box 169, South Weymouth, Mass.

The Kennel.

MOUNTVIEW KENNEL,

FOR SALE TO CLOSE PARTNERSHIP, the entire kennel of dogs, composed of animals of the rarest breeding and most successful field winning strains, to-wit:

LINCOLN—White and orange dog, whelped 1876, and imported from Mr. Llewellyn's Kennel. By Dan, ex-Lulu H., second in brace with Gladstone, Tenn. field trials, 1878; first Free-for-All N. A. K. C. field trials, 1879; second in braces with Count Fred N. A. K. C. field trials, 1879, at Patoka, Ill. By Dan, a magnificent field dog and a splendid breeder. Price \$1,500.

COUNT NADLER—White and black dog, whelped August, 1879, imported from Mr. Llewellyn's Kennel; by the great Count Windham, ex-Nora. Price \$300.

LAD—White and orange dog, whelped 1879, by Lincoln, ex-Daisy Dean. Price \$200.

CONTOUR—White and black dog, whelped 1874, bred by Mr. Llewellyn, and imported 1879; by Dan, ex-Countess. The only Derby winner in America. First Field Trial Derby, 1875, England; second last, First Field Trial Derby, 1875, England; second last, Crystal Palace, 1879; second All-ages Stakes, 1879, at Silversbury; second Birmingham, 1876. Her puppies, Dashing Beauty, won the Puppy Stakes, and Dashing Beauty, the dam of Count Windham.

DAISY DEAN—White and black dog, whelped 1875; by Pride of the Border, ex-Lulu, dam of Pearl of Manry, winner of Puppy Stakes, Tennessee field trials, 1878, and dam of Sam, who ran second in Derby's Hill in the St. Louis K. C. Cup, 1877. Price \$250.

BLAZE—Blue belton, very handsomely marked, whelped 1875; by Sam, ex-Countess Bear, and Mr. Llewellyn, and imported 1879; bred in September to Lincoln. Sam won first in three field trials in England. Price \$200.

DASHING PLOVER—White, with black ears, whelped 1878, imported 1880; bred by Mr. Llewellyn; by Dush, ex-Phantom, the dam of Count Windham. Dush is the greatest field trial winner that ever lived, and the highest priced dog that Mr. Llewellyn ever bought. Price \$200. Address JOSEPH H. DEW, Columbia, Tennessee.

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For Sale—A full-blooded Gordon setter dog pups; very handsome; perfect black and tan. Sire Da-bah the great prize winner; dam, the beautiful bitch Maud. Full pedigree on both sides. For a good dog. CHAS. T. BROWNELL, P. O. Box 350, New Bedford, Mass.

FOR SALE—My Gordon setter bitch, staunch, stylish and well broken. Good retriever. G. W. DALL, Fall River, Mass.

SUPERIOR IRISH SETTER PUPS.—For sale, a brace (dog and bitch) of very handsome Irish setter pups, 4 months old, in perfect condition. Dam, the grand bitch Nora (out of Tiley by champion Burke), winner of 1st prize N. Y. 1880. Sire, Champion Jerry O'Meara, winner of 1st prize at Champion, Ireland. These pups are exceedingly fine in color and form, and for blood and quality no better can be imported. Price, dog \$30, bitch \$25. For printed pedigree and particulars address W. H. PIERCE, Fiskeville, N. Y.

IN THE STUD.—Gordons; black and tan, sire Import, imported 1877, by Shot, Jr., 1879. E. K. S. B. ex-Rhona, 1880. E. K. S. B. dam Whip, second in imported Duke and Gypsy. For \$25. Duke of Lowest Valley; black and tan, limited to 6 months, sire, Toledo Kennel Club's imported grouse, E. K. S. B. 1877, ex Grace, 2d prize winner, Gloucester, 1879. For \$25. Pups from the above and others of best blood in Gordons on hand and for sale, also matured brood bitches. In whelp. Address JAS. R. TILLEY, Leicestershire, Va. L. I.

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Composed of the NERVE-GIVING principles of the ex-brain and wheat germ. It restores to both brain and body the elements that have been carried off by disease, worry, overwork, excesses or nervousness. It promotes digestion and strengthens a failing memory. It prevents debility and consumption. It strengthens the brain, gives good sleep, and recovers after excesses. Physicians have prescribed 200,000 packages.

For sale by druggists or mail, \$1.

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THE SECOND ANNUAL MEETING OF THE

EASTERN FIELD TRIALS CLUB,

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ON

Nov. 29 and 30, and Dec. 1, 2, 3 and 4.

OPEN TO THE WORLD.

ALL-AGED STAKES.

Open to all Setters and Pointers. Limited to 50 entries. First Prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25; forfeit, \$15.

PUPPY STAKES.

Open to all Pointers and Setters under 18 months of age. Limited to 25 entries. First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, \$15. Entrance fee, \$15; forfeit \$10.

NURSERY STAKES.

Open to all Setters and Pointers under 12 months of age. Limited to 15 entries. First prize, \$60; second prize, \$40; third prize, \$20. Entrance fee, \$10; forfeit, \$7.50.

BRACE STAKES.

Open to all Setters and Pointers. Five braces to run or prizes to be scaled. First prize, \$250; second prize, \$125; third prize, \$50. Entrance fee, \$25; forfeit, \$15.

CLUB STAKES.

Open to members of the Club only; dogs to be owned and hunted by the members making the entry. Prize, a hundred dollar piece of plate, to be selected by the winner. Entrance, 10 per cent. of the value of the prize. This stake to be run after the close of the running of the Brace Stakes, and entries close on Nov. 18th.

Entries will be received for the open stakes up to mid-day of Nov. 27th, at the office of the Club, and on the grounds up to the evening before the trial.

JACOB PENTZ, Secretary.

P. O. BOX 274, NEW YORK CITY.

Entries must be accompanied by forfeit money in all cases. Judges to be named one month before trials.

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MR. J. H. BILLINGS, U. S. N.

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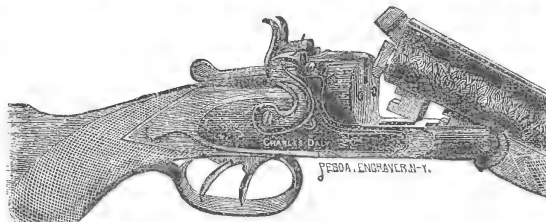
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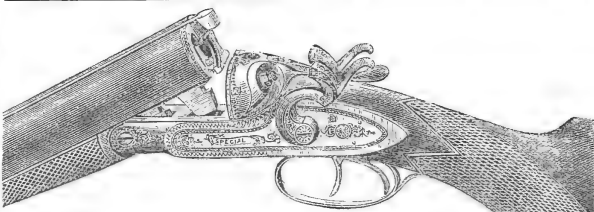
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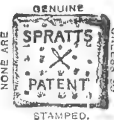
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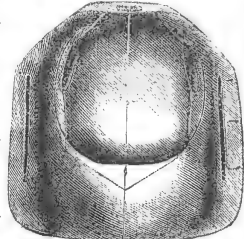
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NEW YORK, THURSDAY, DECEMBER 2, 1880.

Vol. 15—No. 18.
(Nos. 39 and 40 Park Row, New York.)

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FOREST AND STREAM.

NEW YORK, THURSDAY, DECEMBER 2, 1880.

* * The FOREST AND STREAM goes to press Wednesday. Correspondents are requested to mail their communications so that they may reach us before that day.

It is our conviction that any man who will shoot on Sunday in New Jersey will break any and every other provision of the game laws.

THINGS have come to a pretty pass when the 25c. and 50c. pools on the dogs at field trials are telegraphed over the land. This boys'-play gambling is ridiculous, but if we are to turn the field into a race track, with all the accessories, we might better stop now.

THERE is at least one game protective society in this country which has succeeded in doing what it started out to do. Some of its methods are explained elsewhere. We commend a study of them and of their results.

ADIRONDACK FIRES.—Many destructive forest conflagrations have resulted from the carelessness of Adirondack visitors who, upon abandoning camp, have left their fires burning. There is at present no provision of the statute which touches this point, and we hope that those who are now amending the game laws will see to it that a clause is introduced, which shall oblige all parties to carefully extinguish their fires before leaving camp. It should also be forbidden under severe penalties to leave any offal near a spring or brook, this practice inevitably driving away the game.

As the parties who commit these abuses are generally known, it would not be a difficult matter to apprehend them were there something in the law to cover the case.

THE COMPLETE ANGLER.—We have received a copy of a new addition of "The Complete Angler; or, The Contemplative Man's Recreation," by Izaak Walton, and "Instructions How to Angle for a Trout or Grayling in a Clear Stream," by Charles Cotton—with copious notes, for the most part original, a bibliographical preface and a notice of Cotton and his writings by the American editor Geo. W. Bethune, D. D. New edition, with some additions and corrections from the editor's own copy. Two volumes in one, published by John Wiley & Sons, New York. A large octavo of 662 pages printed on good paper in clear type and beautifully illustrated. We will review this important addition to American angling literature in a future article.

A GIGANTIC FISH TRAP.

WE have seen a circular headed "The Long Island Fish Company," which is now being circulated. It states that the company has been organized under the laws of the State of New York "for the purpose of leasing and owning suitable locations for the erection of weirs, and erecting weirs or pounds (sometimes called traps) at such locations, and catching and selling all kinds of fish, and rendering fish for the oil and for fertilizers."

We also learn that the company has become the owner of a tract of land at Napeague beach, near the eastern end of Long Island and a few miles west of Montauk Point. Here they propose to put out a monster trap; and as one built in the ordinary manner with poles would not stand a week on this straight line of the Atlantic beach which is so frequently storm-swept they propose to put down iron piles after the manner of the ocean piers at Long Branch and Coney Island. They have chosen a place where the island is only half a mile wide; Napeague Bay, an indentation in Gardiner's Bay, being on the other side, where their vessels can load for Sag Harbor and where their factories and ice houses can be built. There is no question about the millions of fish to be captured there, as all the fish which traverse the beach coming from the East seeking the inlets of Shinnecock Bay and Fire Island, as well as those moving to the eastward to round Montauk and enter Gardiner's and Peconic bays, or to enter Long Island Sound, traverse this route, and the fishermen often make enormous hauls there when the weather permits. Here, too, they come nearer the shore than at any other point, for there are no sand bars outside the beach to force them out for deeper water.

This monstrous affair will fish night and day the year round, and take fish which should be allowed to fill their mission of spawning. They say "a weir is fishing night and day and not only catches the schools of fish accidentally seen from the shore or from the deck of a fishing smack, but catches everything that comes along, and schools of fish not apparent from the surface."

The weir is to run 600 to 700 feet into the ocean, into thirty feet of water, and with this they suggest that persons taking stock may receive a great return, say \$1,000 per annum for every \$100 invested, and assert that "with the iron weir more menhaden can be caught than the whole fleet of boats can catch. We have no opinion to offer as to these statements, being content, for the present, to present the facts as they appear. We do not hesitate to say, in this connection, that all fish seeking our shores to spawn should be allowed to do so, and that the Menhaden Association are killing their goose by allowing the fish to be taken for manure when they come to spawn and are worthless for oil.

An article in the New York World describes the trap as follows: "The weir will be an iron pier ten feet wide, with bents or sections twenty feet long. It will run out 700 feet, with thirty feet of water. At the outer end will be the heart-shaped pound, the large end of the heart in-shore. This heart is about seventy feet across and outside of it is a box of iron piles and netting about seventy-five feet square. The fish striking the pier netting will run out seaward to the heart and, passing out at the lower end, will find themselves in the outer receptacle. In the sections of the iron weir storage for thousands of tons of fish can be provided, where they will keep alive in their native element for a month or longer, and need not be brought to market when the price is low."

The office of this company is 71 Broadway, New York. Mr. Herbert M. Rogers appears as president and Mr. Herbert C. Plass as secretary and treasurer.

EASTERN FIELD TRIAL Gossip.—We shall now have a chance to see the Eastern and Western dogs work together. Mr. S. T. Hammond, of Springfield, Mass., has a lot of good ones in hand, and Mr. C. B. Whitford is at the Eastern Field Trials Meeting with Gladstone and Peep o' Day.

Mr. A. H. Moore's kennel is at New Suffolk in charge of Mr. E. S. Wammamaker as handler, Mr. S. T. Hammond is there with Afton, Sensation, Rattler and Bob; Mr. John C. Higgins, of Delaware City, Del., is on hand with some of his fine dogs. Dr. S. Fleet Spier's kennel is in charge of Jefferson Cooper. Mr. Godfrey's entries for the trials, among them Croxeth, are in charge of J. E. I. Granger. Bassford, of Westchester County, is also there with good dogs.

PRESERVED GAME GROUNDS.

OUR proposal last week, that those of our readers who would be willing to make a fair remuneration to farmers for the privilege of shooting over their lands should send their names to us, has met with the response it deserved, and we are encouraged to again bring the matter before the gentlemen sportsmen who read the FOREST AND STREAM. As the general plan of the work which we have undertaken was fully set forth in our last issue we may here repeat:

The FOREST AND STREAM does not stop with a reiteration of the general recommendations here given.

We propose the first trial of a carefully matured scheme, of which the general purposes are:

1. The protection of game birds by farmer and landowner for the benefit of the gentleman sportsman.

2. A fair remuneration of the farmer by the sportsman for privileges granted.

3. Putting the two interested parties into direct communication with each other.

4. A discrimination between gentlemen and rowdies, and the protection of the farmer and the gentleman sportsman alike from the direct and indirect injury of lawless gunners.

5. The uncompromising enforcement of the law against netting and snaring—not in the interest of the sportsman as against that of the farmer; but for the mutual benefit of both.

6. The united efforts of farmers and sportsmen to duly protect and replenish the supply of game.

To put into tangible shape such a scheme as this, we must at the outset receive the endorsement and co-operation of the sportsmen who are interested. If we have not mistaken, we shall receive this; and without further preliminaries, we now call upon such of our readers as approve of the plan, and are willing to join us in it, to send their names and addresses to this office. We invite correspondence on the subject.

We publish elsewhere some correspondence on the subject, and have received other letters, which will appear next week.

HOW HE IS MISTAKEN.

AN old time friend and correspondent of the FOREST AND STREAM sends us some articles with this remark:

If you think as I do you will see the necessity of having fine articles on the closing of the year so as to induce old subscribers to renew and new ones to subscribe.

We know that our friend means well, but he is mistaken. We do want fine articles at the closing of the year; but we want equally fine letters and sketches at all other seasons. The current numbers of the FOREST AND STREAM are such as ought to induce old subscribers to renew and new ones to subscribe, but casual readers may rest assured that these numbers are not exceptional in merit. We mean to make a good paper for twelve months, and fifty-two weeks in the year. We hold out no inducements to subscribers at this time that we do not also strive to hold out all the year around. We are trying to conduct the FOREST AND STREAM in such a way that it may be depended upon every week for a supply of the best sportsman's literature published in the world. This effort is not sporadic nor confined to occasions.

OUR FIELD TRIAL REPORTS.

OUR reports of the National American Field Trials Meeting, which gave full telegraphic accounts of the running up to the day of going to press, were a step in advance of any similar work done by any weekly paper in this country. It is certainly a new thing for the readers of a "sporting" paper to have the news of current events furnished to them so fresh as was the case in this instance, and as it is done today in our reports of the Eastern Field Trials Meeting.

Great credit is due to our representative in the field for the careful and accurate account which he gives of the running, and we have no doubt that our readers in all sections of the country will appreciate the efforts that we are making to give them the very fullest and latest news on all current events.

The full news of the runnings of the National Trials was published at least eight days in advance of any other paper in the United States, and came to the readers of FOREST AND STREAM 60 much ahead of the general public.

The Sportsman Tourist.

A WEST VIRGINIA FOX-CHASE.

THE snow had been falling all the day—great, soft, feathery flakes that changed the loathsome shrubbery into fairy bowers and powdered pine and cedar with gems and jewels. My friend Hal was with me—his farm lies next my own and we have hunted together many a year. Our packs are small, but of the choicest strain of blood; and I had only a little while before added to mine Ringwood, a beautiful black-and-white from one of the most celebrated packs in the Old Dominion.

"What say you to a chamois-tromp, Hal?" said Hal, looking out upon the forest. "The loathsome shrubbery is now so splendidly white, with the snow deep and soft, that I will see what Ringwood can do, and I will wager you my hunting horn against your spurs that he is not so fleet as my dog Ashby."

"Done," said I; "he's ready early. We can soon have up a red in the old beech woods, and then we will see whose dog is fleetest."

By break of day next morning Hal blew his horn at the meadow gate and I soon joined him with my pack, having fed them well the night before, but giving them to breakfast. It was still quite warm, with the snow melting rapidly. We rode at a lively pace to the river bank in the great beech woods and cast off the dogs, who were impatient of restraint and full of fire. In a few moments we heard a solitary dog giving tongue over the hill among the laurel, and in an instant another joined him. "It's Ashby," said Hal. "Yes, and Ringwood," said I. "Did you ever hear the voice of hound so clear and musical?" Just back of the laurel thicket is a meadow of three miles in width and smooth and level as any Texas prairie. Dog after dog joined in the cry until the whole pack were giving tongue in wild excitement. We galloped to the edge of the meadow just in time to see the fox break cover and away across the meadow to the cliffs and stream beyond, the pack not three hundred yards behind and racing by sight, Ringwood and Ashby running side by side and the others close behind. "He will never reach shelter," cried Hal, dashing spurs to his throat, and riding well up to the pack. "We must have alarmed him and turned him back, or he would never have risked it." It was a mad, wild chase, the gap widening every moment between the leading dogs and the pack and closing between them and the fox.

"Don't you see, Hal," I cried, "that Ringwood is pulling away from Ashby? He is now half his length ahead and gaining; now there is a good yard of daylight between them, and that Texas hound is mine." Ringwood was flying like the wind, but still Ringwood was closing up the gap and was now not fifty yards behind him and gaining at every bound, Ashby ten paces off, and the rest of the pack running well together in the rear. Two-thirds of the distance had been passed when Ringwood pressed him so closely that Reynard turned and offered battle and was torn to pieces before he had time to feel the pangs of death. XII. YORKS.

Bridgeport, W. Va.

IN THE CANADIAN WILDS.

MATAWIN RIVER.

August, 1880.

RAIN, wind and cold; salt pork, misery and desolation, and all the *et cetera* that help to make life in a seven-foot tent uncomfortable. However, rainy days are good for something, for then we mend our ragged codrroys, clean our guns, look over and repair our fishing tackle, and plan future excursions. Rainy days are also days of letter-writing and as I want to ask **FOREST AND STREAM** a few questions I will at the same time try and give those who have not "been there" a notion of something in the Canadian backwoods. Is this not a backwoods? where is it? Looking out of the tent door this same rainy day, one sees a small lake with very black water, weeds and a few pike and dore. The surrounding country is bristled—forests of dead and blackened spruces and windfall and second growth, hills and valleys of sand, the valleys usually occupied by lakes, with here and there a mountain of the old Laurentian gneisses showing his head up through the remains of a forest that partly clothes him, as though he were not ashamed of his ugliness. When a cold wind is blowing, sky cloudy and heavy rain falling, such a "bit" does not send a matter-of-fact individual into ecstasy over the beauty of the country. But to the country's credit be it said that it is not all like this. There are some beautiful lakes among these old hills, and they are the more charming to the sportsman who, as he begins to put his rod in order, sees many a large trout break the surface into ripples.

What to call this "blasted country" I have not decided—Land of Rocks and Lakes? "Paddle and Portage," or "Land of the Mosquito and Blackfly." A mixture or combination would suit it best I think, for all the above are in strong force, and the two last will not allow themselves to be left out of the programme.

Here I sit in my dreary tent, and the musical mosquito takes his dinner while I wait for my mine. The blackfly contributes his quota to the general amusement, and though he will vanish at sunset his place will be ably supplied by the brulot or midge. I don't know who first originated the yarn, but even there is, that the blackfly goes to his long home in the middle of July, and that when their feet are white they are going to leave. I say I don't know who was the inventor of this bit of natural history, but if I had him here, provided he was a small man, I would inflict severe corporal punishment, and then, "injun" fashion, tie him to a tree in his bare pelt and let the flies at him. Why, the blackfly bites until the frosts come. I have seen them, yea, and felt them in October and there, but in winter set in. Very like a fish story, but true nevertheless.

But to the country. Around us stretches for miles a vast wilderness—it is little better—of lake, rock, forest and brulot; lakes abounding in trout or pike and dore, supporting broods of ducks and, so naturalists say, producing all kinds of blood-thirsty flies; river-valleys well stocked with grouse, ruffed and Canada, hares, beaver, otter, mink and loup cervier, or lynx, for small game; and moose, caribou and black bear for large. But I have forgotten the muskrat, an unparelleled fault, for many a meal of muskrat every locality of that same "rat" have I eaten by the camp fire, and though of course one would prefer deer, bear, or beaver, rat is not to be despised when there is nothing but "cookoosh" (salt pork) in camp.

In spite of these numerous attractions in way of game

we are not likely to be overrun by sportsmen from the cities for a few years, as there are grounds more accessible and, I hope, better stocked. However, the country will keep, and will not spoil by keeping either, as far as settlement is concerned. It offers no attraction to the farmer, as none of that class has as yet been found, and so would come in here. There has been found as yet no minerals of importance, so that mining is not likely to be an enterprise, and to the hunter and trapper does it belong. Lumbermen had a share in it, but as most of the best timber has been cut out and burnt out, not much is done in that line.

Of course in such a country things are done in a different style from on the Western plains, where it was a saying that a horse and backboard could go anywhere. Here roads do not exist in summer days, and the main means of transportation would be as absurd to attempt as impossible to accomplish. Canoeing and portaging are the only means of transport in summer, and every pound of outfit that comes into camp comes on a man's back a great part of the way; so little is taken on a long trip save necessities that no fellow can do without.

This portaging or carrying is done by means of a long strap, broad in the middle, which middle passes over the top of the head, and the load rests across the packer's back—no, it doesn't rest, it hangs, and nearly all the "hang" is on a fellow's neck. Most sportsmen of the North know a "collar," but to all it is not given to experience the sensation of walking along a log with 100 or 150 pounds on one's back and having the bark come off, so that a gentle drop of a few feet shortens your neck with a jerk on reaching bottom. I think I should have been a six-footer if I had not taken to the collar, and finally believe that several of the vertebrae of my spine are welded together simply by that infernal strap.

This carrying on the head has its advantages, however, for in case of a slip an old hand will throw off the load and come to grass with only his own weight, and had the strap been over his chest he must have gone down with it and perhaps have been hurt; indeed, I knew of a case where a man, walking on a log over a creek, slipped and fell with the collar on his chest; with the usual perversity of life in such places, the pack fell off one side of the head, and the man, the other strap slipped up across his throat, he hadn't his knife handy, and was tolerably well choked and black in the face, when another chap, who was fortunately behind on the trail, put in an appearance and set him on his feet again. Tremendous loads are carried by these voyageurs—200 or 250 pounds is not called a heavy load for a good portage, and should I say what weights I believe have been carried, people would probably set me down as a "Mooseman."

The primitive bark canoe is the only means of conveyance by water. Here the many patent canoes of the United States are unknown, and should any one advise their use to a bushman he would most likely remark that "his old bark was better than any bloody new-fangled concern," as one said to me when I praised a "Lakeland." These are not apparently the same vessels that novelists write about, for the latter are generally described as "frail as an egg-shell," and even Balmorye, when used in the hands of a youth, falls into the category. Now, our canoes will stand a blow from a round stone that would make an ordinary boat leak at a good many seams; and if they do leak—well, a birch-bark torch, a little gum, and a piece of rag, and we are O.K. again.

Only twice have I smashed my canoe and both times it was the fault of the crew. Crossing from the Gatineau River to the L'Anse-au-Fort, I could get no men, as the season was near its close, so after much deliberation my clam and I set out on our journey, leaving a poor canoe-man and his wife, if anything worse, and neither knew anything about the country. However, off we started, and all went well as long as we had the stream to paddle against and not to run down. We only got lost once, but found ourselves after a couple of hours' search, and had no accident until we reached the water-shed of the two rivers. Now we couldn't get lost, but we could get smashed; and this was our fate.

The rainy morning, having run several miles rapidly safely, we were caught by a thin fog, and as we progressed made, when we reached the head of a small rapid—steep, swift water, and in the middle, at the foot, one huge boulder. "T," said I—he was in the bow—"how goes it?" "We can easily reach the foot by holding back, but there the only water is close to that rock."

"Well, we'll go to the left of it—and mind and don't reach forward"—he had an abominable habit of reaching forward and putting his paddle on a rock, instead of giving a hard stroke. "All right," he said, "I'll hold you, and you end, I'll take care." "T," he said, "it's the only water," said I. "All right." Down we go, "backing," here and giving a stroke there, and not a touch until we near our friend the rock, gathering speed every instant. "Now! Left!" I shout. "Swifter is the pace." "Left! left!" I howl, as T. reaches forward, and there is a hideous crash—then we are in the eddy, and then in shallow water, as she sinks under us. Fortunately T. was kneeling. This is a hole you could put your head into in the bow, and we almost weep as we think of the sugar, etc.—a mass of "mush." No us crying over spilt milk, so we turn her over, light bark, melt gum, tear out the bark of my vest and stick it over the hole, and paddle 140 miles of river with that primitive patch on the canoe. What Lakeland could be mended thus?

Another upset I had that nearly cost me my gun and rods and other "et cetera" may many fellows if they ever sojourn in the same district. Camped on a river, which was in a "wet flood," and two days of wet weather make into a nice little torrent, my cook one morning woke me with "Six o'clock, sir, and breakfast nearly ready." So throwing off the blankets I turned out and looked out of the old lumber shanty we had appropriated. A gloomy morning, with heavy steady rain, and as the same weather had held good for two days before, we had our torrent ready, the river being nearly three feet over the ordinary level. This was a bad day for the day, and, going on the principle of "the better the day, etc."—it was Sunday—I resolved to start. For some reason, possibly because it was Sunday, I couldn't get a man who knew the river, and we had to go it as we best could. Now "Jim," so good at fish-balls and plum-duff, etc., was no canoe-man. Arthur was but a youth, and I was decidedly average with a paddle. Of course the bow was the delicate part, but I took that at once, and Jim, standing on the shore, not steering—ran me down a rapids—backing or rather "duked" through it by having the canoe light. So we take our usual places, Jim in the bow, Arthur in the middle and myself in the stern; and with three inches of the gunwale above water we embark. Two rapids are run with a little water shipped; and we come to the head of a nice short little one—nice and steep and rough, too. We had run it before, and though I had sundry qualms as I saw how low we were in the water, I gave a word to the boys and in we ran. Bet-

ter had we gone ashore. She goes down the slope like a flash in spite of our holding back; through the first swell goes her sharp bow and she is half full. I dare not yell "Out!" for the boys wouldn't know how to take the water and not upset her. No use holding back now, we must keep lurching. Down we go, over rocks, over sand, and the gets lower and lower, till, when having escaped the rocks, we reach the eddy at the foot, she is nearly out of sight. "Out!" I howl, and out I go. Arthur slips over the side, and Jim, who thinks shore the driest place, makes a dive for it; over goes the canoe, and down go my rods and gun into fifteen feet of water. I come to the top, shake the water out of my eyes, and could laugh, if I didn't feel more like swearing. Jim is trying to get away from a log, the other two are trying to get his back; Arthur has a canoe by a bar and a grip of a branch, the impediments are running a race round the eddy, and I am off down stream. I grab a bundle, get hold of a rock and climb ashore, but would prefer not to have fishing boots on. The others, who are better swimmers, are on dry land. We rescue the floating "kit," bundle the traps into the canoe, and paddle down to the cache of the day before. Here tents are pitched, a fire lighted, clothes changed, and we are once more comfortable. When the river falls to its usual level we go up and by a few lively dives recover my traps, not much the worse for their dip. But the chaff I get makes me vow never to try it on again alone and with a heavy load, until, in a fit of laziness this summer, I run a rapid, or rather run a little of it, break the canoe, go down a hundred yards of the swift water, hanging on to the stern to keep her upright, and when I do get ashore, portage and reach camp, am told by my man that he "followed" ever run so rapid. Such is life. I shanty here and am spinning yarns without a moral. I had intended to go into outfit thinking that we who camp all and every summer, and frequently in the winter, might give a wrinkle to those who have not been "out"; but as I have wasted several sheets of paper and probably "it will all end in smoke," I will subside. WARREN.

IN A COUNTRY HOUSE LIBRARY.

THERE are times when one wearies of the continuous glare of bright sunny days that ever invite from serious occupation with the irresistible influence which pervades the sunlit smile of beautiful nature. The aid afforded to meditation and the increased gladness and sympathy felt in company with one's books opens a new and increased appreciation of the charms of rural beauty when the blurred veil of rain is upheld. So tonight I sat wet November afternoon succumbing to a tedious good shooting, and I had abstractedly from the window of what my young host termed his den—a half library, half gun and smoking room.

Between the scantily clothed lawn trees could be seen, beyond the faded green of sloping hillside, the dark waters of the valley-lying lakelet sizzling between two wooded hills, which rose precipitously from the flood that lapped the rocky shore where the ferns lay yellow and dead in the cold, damp glow of enormous recesses. And along the further shore where the brown hillocks of a bog meadow were seen in the narrow vale of the hillside's spurs, the reeds and cat-tails were sere and brown back of the withered lily pads. And one turns from the window wondering if this was the scene that was so enchanting yesterday, when ranging the coverts "all in the golden evening."

The oil-covered laminations of the guns upon the rack glistened in the rays of the bright, illuminating fire, while above the open book-case, clinging to the lower corner of the farther wall, where curious sundries lay behind the vases and fantastic curios that adorned the top piece, the fly-rods have rested since the bass ceased to strike and the trouting season closed. The stuffed game birds, silent mementoes of sporting scenes and sometimes of comrades past and gone, adorned the bracketed corners, the English sporting prints upon the walls—all indicated the healthful tastes of the sporting owner.

Notwithstanding the great interest taken in sport and sporting accessories, we yet have to look to the mother country for the means wherewith to fitly and economically decorate our walls and libraries with illustrations of the most fascinating of all field recreation—shooting. No other shooting in the world affords such a diversity of picturesque rural views, bordering at times upon primeval wildness, as does America, and the sportsman who, with his natural distaste for the statuesque grace of the panther dog, and the human figures expressive of the gentle and absorbing exhilaration of the moment, this vacant branch of American art is worthy of the most artistic filling.

But an engraving akin to the "Sportsman at Home," though English, is entirely applicable with us now, as the habits and sporting adjuncts of our two countries are identical; and the amateur alike the sportsman, congenial distinctions of symbols upon the return from a day's sport, while the amber twilight hangs over the russet hill top, and come into the blaze of the firelight with ruddy visage and muddy gaiters, while a privileged setter drops upon the hearth rug. And nothing have we in our illustrated literature comparing with the felicitous reproductions of sporting and rural life and hunting stories in colors, as is embraced by a standard London weekly.

A like dearth of sporting cognitions there seems to me in the domain of American fiction. The delineation of American farm and manor life and rural sports has been, as yet, the almost exclusive property of our sporting writers, and advocates more extension in graphic portraiture of their varied attainments and protean charms, they could not have; and, with but few and anomalous exceptions, has the higher order of country life, its idyls, common places and diverse exhilarative sports, been interwoven in the thread of an essentially American novel.

And to this one cannot but attribute the popularity of the English society novels to the presence of scenic representation, manorial occupations and well defined character sketches, as in communion with that innate sporting instinct that is possessed by most of the Anglo-Saxon race, in respect of sex or vocation. Descriptions of the grandeur of the love of mountain and food has often appeared as the background and settings of some game, chess, or love story, pervaded with the hearty essence of the mood, and the breeze from the loch, the report of the gun drowning the whirl of many wings, or the clicking of the rapidly-unwinding trout reel; the roar of the stream before it is engulfed by the silent tan, dark under the shade of the purple hill; all antithetically contrasted with heat, dust and glare of the London season, as, for instance, the delightful works of William Black and Miss Grant's "My Heart's in the Highlands" exemplify.

It was Malcolm himself who interrupted my reverie appearing upon the threshold, saying that the occupants in the

library had done me the honor of "wondering at" my hermit-like absence. He, however, was talked out and had come to his haven of refuge for a pipe.

It was while lighting his violetwood that he pointed across the lake with "Look, Warwick, are those not ducks in the west end?" "Tenz! You're right. Rig up, old fellow, and we'll take the skiff after them." Then drawing out an oil-tanned leather jacket from a cupboard, he opened a cabinet whose interior did service for an ammunition box, and I left him swabbing out the oil from the barrels of a ten-bore as I hastened to my room for my Scott, Mackintosh coat and Glengarry bonnet.

FRANK WARWICK.

Natural History.

OUR WATERFOWL.*

IV.

THE *Anatinae* may be distinguished from the *Anserinae*, or geese, on the one hand, by having the tarsus scutellate, and from the *Fuliginae*, or sea-ducks, on the other, by having the hind toe simple. In other words, the tarsus, which is the naked portion of the bird's leg between the origin of the toes and the next joint above, is covered in front by broad, overlapping scales, instead of being, as in the geese, "reticulate," or covered with small, approximately six-sided scales, which merely meet and do not noticeably overlap. The hind toe is short, elevated, and has no lobe of skin depending from it.

The *Anatinae* have been termed by different writers Fresh-water, River, Shoal-water and Inland Ducks. As a group, they may be said to be confined to fresh waters, although they are often found on the sea shore, and some species occur during the migrations more abundantly on salt water than on inland lakes and streams. They feed to a very great extent on vegetable matter, and as a result of this diet their flesh is excellent eating. The legs of the *Anatinae* are placed well forward, and hence they are quite at home on dry land, where they walk and run with ease. Unlike the geese and swans, in which the two sexes resemble each other in color, the males of the *Anatinae* are, as a rule, more brightly plumaged than the females, while the young of both sexes resemble the latter.

The female alone performs the duty of rearing the young, the males deserting her as soon as the eggs are laid.

Anas boschas. Mallard; Greenhead (male); Gray Duck (female). Male, head and neck, brilliant glossy green, bounded below by a collar of white; breast, deep chestnut, fading on the back into brownish gray; lower part, gray, transversely barred with black; wings, black tipped; speculum, or "wing spots," violet, with a black border; tail feathers, white; bill, greenish yellow; feet, orange. The female has wing as in the male; everywhere else, yellowish brown, marked with streakings and specklings of black. Length, about two feet; weight, about three pounds.

The mallard is perhaps the best known of all our ducks, and as the progenitor of the common domestic duck, its appearance is familiar to every one. It is found almost everywhere throughout the United States, being least abundant in New England. We have occasionally found them in Connecticut associated with the next species, but they are unusual even there, and occur still more sparingly in Massachusetts and to the eastward. In our Western and Southern States, however, it is extremely abundant during the migrations, and probably in these sections more ducks of this species are killed each season than of any other. They are shot in the grain fields, in the sloughs and in the rice swamps, and come well to decoys.

The mallard breeds in considerable numbers within our borders, and on the plains and in the Rocky Mountain region may fairly be considered a resident. We have seen them in the dead of winter, when the thermometer stood 13 degrees below zero, on open spots on the Lodge Pole Creek in Nebraska and Wyoming, and know of their having been taken on warm spring holes in the Elk Mountain Range when it was much colder. In fact, from favorable feeding-grounds they are only driven by the absolute closing of the waters. In California, during the winter, they are very abundant, and form a large proportion of the ducks that then abound there.

Anas obscura. Black Duck; Dusky Duck; Black Mallard. The black duck closely resembles the mallard in form, and in color is like the female of that species, but the general tone of the plumage is much darker. The bill is yellowish green, and the feet orange, with dusky webs, or wholly dusky. It is about the same size as the preceding species. The female is somewhat duller in color than the male, and is smaller.

In New England and along the Northern Atlantic coast, this species almost wholly replaces the mallard. It is found in less abundance in the West, and is not common beyond the Mississippi River. We have seen occasional specimens, however, in Nebraska, and Dr. Yarrow has reported the bird from Rush Lake, Utah. On the Northern Atlantic coast it is the only one of the *Anatinae* that occurs in sufficient numbers to furnish good sport.

* Many of the descriptions of waterfowl given in these articles are taken, almost without change, from Dr. Coues' "Key to North American Birds." Since that author's descriptions are models of conciseness, and, at the same time, call attention to the salient features of each species, it has been thought better in many cases to follow him rather than to attempt to better what is already so good.

Where black ducks have been much shot at they feed only at night, and in some localities we have known them to be so suspicious that they would not leave the open water for their feeding-ground before midnight, and would be off again before daylight. In some localities the species comes well to decoys, and is shot from blinds built on the feeding-grounds, or from batteries; but most of those taken on the Atlantic coast are killed as they fly from the open water to places where they pass the night. In very severe weather, when the feeding-grounds are covered with ice, the black ducks suffer severely. They are then obliged to resort for food to such warm springs as may be still open, and the gunners, taking advantage of this, kill great numbers of them.

The black duck sometimes breeds with the domestic duck, and the offspring of this intermixture makes an excellent table bird. It has also been domesticated, and after a few generations reared in captivity would, no doubt, make a valuable addition to the poultry yard. Being usually kept with other ducks, however, they soon lose their characteristic color, and cannot be distinguished from the ordinary domestic bird. Such of the offspring of the black duck and the tame mallard as take after the wild parent make excellent black duck decoys, and can without much difficulty be trained so as to be of great service to the gunner.

A smaller variety of the black duck, denominated by Mr. Ridgway *Anas obscura fuligula*, is resident in Florida.

Daifia acuta. Pintail Duck; Sprigtail; Pheasant. Male, head and upper neck, brown; stripe on side of neck, breast and lower parts, white; sides and back gray, waved with black; dorsal line of neck and tertiary wing feathers, black; scapulars, black, bordered with silver gray; speculum, green; tail, long, 4 to 9 inches, the black middle feathers extending far beyond the others; bill, black; feet, gray blue. Female colored much like the female mallard, but paler; always to be distinguished from that bird by the narrower, differently colored bill, different feet and more pointed tail.

The pintail is an extremely abundant and widely distributed species. It occurs in greater or less abundance everywhere from New England to California. During the migrations it affords much sport to gunners in the Western and Southern States. Up to within a short time it had been supposed that this species always retired to the far North to breed, but Dr. Coues has shown that some breed in Montana, on the tributaries of the Milk River. During the month of July he found in this region young birds scarcely able to fly. In Alaska, according to Mr. Dall, they breed in considerable numbers.

The pintail is one of the most graceful of our ducks, and appears to equal advantage whether seen in flight, on the water, or on dry land. They associate freely with mallards, teal, and other fresh-water ducks.

Chaulestasus streperus. Gadwall; Gray Duck. Male with the pale gray plumage, somewhat barred with black; shoulder, chestnut; greater wing coverts, black; speculum, white. Female smaller, with little or no chestnut, but with the other wing marks. Bill, black; feet, dull orange; length, about twenty inches; weight, about two pounds.

Although the gadwall is said to be distributed through North America at large, we have never found it very abundant on the North Atlantic coast. In the interior it is much more plenty, and furnishes good sport, decoying readily. In the Rocky Mountain region it is abundant during the migrations, and some remain through the summer to breed. Dr. Coues found their nests in Montana, and we have taken them in the mountains of Wyoming, not far from the line of the Union Pacific R. R. In California it is rather abundant.

Marca penelope. European Widgeon. Head and neck, grayish brown, speckled with black, the top white or brownish white; faint traces of glossy green on its sides; breast, brownish red; belly, white; under tail coverts, black; a white patch on the wing; speculum, green, bordered with black; back, gray, waved with black; bill and feet, blue gray. The European widgeon is merely an accidental visitor to our shores, and occurs so rarely that any specimens of it which may be killed should be recorded, and their skins preserved. It can readily be distinguished from the succeeding species by the brownish, instead of gray, head and neck, and by the mere trace of green instead of the broad patch seen on the American bird.

Marca americana. American Widgeon; Baldpate; Whitebelly. Head and neck, grayish, speckled with black, the top white; a broad patch of glossy green on the side; otherwise like the preceding, which it about equals in size; weight, about one pound fourteen ounces.

The widgeon is found almost everywhere throughout the United States, being equally abundant on the seaboard and inland. They are found in great numbers on the brackish waters at the mouths of many of our rivers and bays, and many are shot on our inland waters. We have found this species breeding abundantly in Montana and Dakota, near little sloughs and narrow streams.

[TO BE CONTINUED.]

PROCEEDINGS OF THE PHILADELPHIA ACADEMY.—Part II. of the Proceedings of the Philadelphia Academy of Natural Sciences, covering April to September, has just reached us, and for it we desire to express our acknowledgments. It is replete with interesting matter, and contains contributions from the pens of Dr. Leidy, Mr. Kingsley, Dr. Chapman, Capt. Vogdes, Mr. Theo. D. Rand, Dr. Harrison Allen, Dr. Hartman, Mr. Barbeck, Mr. Lockington and others.

AT ASKLE in another column gives some new testimony on the beaver question.

SOMETHING ABOUT SQUIRRELS.

SQUIRRELS are wonderfully mixed up with childhood reminiscences. Solitary indeed would have been the grand old woods without those ever-present and active little nut-crackers.

The striped or ground squirrel is a sprightly and industrious little body. He is not fastidious in his diet, but his favorite food seems to be beech nuts, of which he frequently stores away large quantities for winter use. It is quite amusing to see the amount of nuts which he will gather and cram into his mouth until his cheeks are distended seemingly to bursting. His deposits are invariably underground, where he hides during the winter, and seldom comes out until cold weather lasts. In the spring when his supplies are short he is sometimes driven to the necessity of digging up young corn which has been lately planted near the woods, which brings him into bad repute among the farmers' boys, who often wage an exterminating war against the whole race.

The red squirrel or chickaree is a hardy specimen of the race, and is bound to live whether nuts are plenty or scarce. They are out in all kinds of weather, and we frequently find them in midwinter in deep pine forests, where they subsist chiefly on pine cones, or rather the small seeds which are found in the cone. He is the most lively and active of all squirrels; his every move, look or action denotes mischief. His favorite home is near settlements and among butternut groves, from the nuts of which he has such an ingenious and workmanlike manner of extracting the meats. He will sometimes lay up large stores of these nuts in hollow stubs and trees for future use. The red squirrel is found sitting upright on a limb with his back turned to the body of the tree and tail curled over his head, while he keeps up an incessant chattering and sputtering which no other species could imitate. Regardless of the boy who is filling his pockets with small rocks, determined to pelt the life out of him, and who, forgets the fact that he generally came out second best in all his former attempts to stone a red squirrel out of a tree top, Chickaree awaits the attack. He does not seem to be much alarmed at the boy's approach, merely making a few bounds upward and squats himself lengthwise on top of a good sized horizontal limb, as much as to say, "You may try me, but I am no danger, you can just see, boy, easy I can slip over to the other side of the limb." Boy begins throwing stones and finally expends all his ammunition without effect, while he knows he cannot get him. Becoming exasperated, he declares he will hoist the squirrel out of that, and begins climbing it. When he gets pretty close to the game the little red runs out on the end of the limb, makes a flying leap, comes to the ground right side up and runs off as though nothing had happened. He slides down, and while pinning up divers nuts in his pants discovers the little rascal in the top of a neighboring butternut tree skipping from branch to branch, clipping off the stems and letting the butternuts fall at a lively rate. Boy concludes to wait a while; he will make something out of that squirrel yet, and after a sufficient time he falls to and gathers up quite a pile, and for lack of a sack to carry them he decides to cover them with barks and rubbish and come for them early in the morning. But in his absence Chickaree sees that every nut on every tree has been taken, and he uses. He is a great robber of birds' nests, whether there be eggs or young birds in it, all the same to him. He is also addicted to stealing hens' eggs, of which he has a peculiar knack of inserting into the small end his sharp teeth without otherwise breaking the shell, and carries them off with apparent ease; in fact, his petty larceny proclivities render him somewhat obnoxious and frequently brings down vengeance on his devoted head.

The nature and habits of the black and gray squirrels are nearly alike, the only difference being in the color of the locality. I believe the former is seldom found except in the Northern and Middle States, while the latter is found in nearly all the Western and Southern States as well as in some localities in the Middle and Eastern States. I have never found the black and gray both occupying the same ground. I have found the fox squirrel among the gray both West and South. They differ in size but not much in habits.

The natural home of the black squirrel is in heavy beech, maple, and pine woods, and here they are disposed to live at a fast rate on the tree tops, leaping from branch to branch with surprising agility. They rarely if ever lay up food for winter, as they seem to be well adapted for foraging in all kinds of weather. However deep the snow may be they have a natural instinct for finding nuts or other food which may be lying under the snow.

The flying squirrel is perhaps scattered over more territory than any other variety, and is not often seen even in localities where they are plenty, as they are decidedly nocturnal in their habits, seldom moving in daylight unless when disturbed.

They are socially disposed, and it is rare that one is found alone. They seem to keep together in families of a half dozen or more high up in the hollow trunk of some old tree. Their power of tying, or rather sailing, is attained by their extending the legs at right angles with the body, which also distends the skin and flattens the squirrel to the dimensions of about five by seven inches. The tail is thickly furred, wide and flat, and doubtless aids them in their flight. Their mode of travel is to run up a tree nearly or quite to the top, and sail off on a descent of about forty degrees until near the ground, when with a sort of swoop they shoot upward ten or twelve feet striking another tree, thence, running up to the top, repeat the manœuvre, and in this way some distance is gained in a short time.

I have frequently while being camped out on dark nights heard those little night ramblers come spitting along from tree to tree, one after another, until a whole family had passed.

Piney Falls, Tenn., Nov. 23, 1890.

ANTLER.

A SICK ORANG.—The orang which is at present at the Westminster Aquarium has had a severe attack of sickness from which, however, it is now happily recovered. The London correspondent of the *Liverpool Post* says: "The missing link who parts his hair down the middle, and has been for some time past on exhibition at the Westminster Aquarium—namely, the orang-utang—has not escaped falling a victim to the malady which has proved fatal to so many of his kind in our climate. The stranger caught cold, and quickly developed into a severe attack of bronchitis, and on Friday night last his medical attendant held out little or no hope of the patient being able to survive the night. However, Mr. John E. Carrington, F. R. S., the naturalist of the aquarium, was determined, if possible, to save the creature's life. He sat up all night with him steaming and doctoring him, and by morning the symptoms were so favorable that the orang-utang was declared to be out of immediate danger. Since then, by dint of careful nursing, the animal has

been brought around, and is now happily convalescent. His patience under his sufferings was, I believe, above all praise, and he took Mr. Carrington's hot baths with all the complacency of a Major Pendennis."

GOVERNMENT PUBLICATIONS.—The Natural History Editor desires to acknowledge with thanks the receipt of the following works: "From the Interior Department, Professor J. A. McMonigot, of North American Finnepeps," from the War Department, Part II, of Professor E. D. Cope's "Report on Extinct Vertebrates Discovered in New Mexico during 1874," by the U. S. Geological Surveys West of the 100th Meridian."

Sea and River Fishing.

FISHING ON THE ST. LAWRENCE.

BROCKVILLE, Ont., Nov. 13, 1880.

A FEW words about fishing, for "recreation," in the St. Lawrence may not be out of the way, now that fishing in that respect may be considered as a thing of the past for this season.

In general, it will be conceded by all who frequent our beautiful water that the quantity of fish has greatly increased since our fishery laws have been enacted, especially black bass and maskinonge have augmented since 1875 wonderfully in numbers among the anglers. I am not, however, then an unlucky sportsman will say everything to the contrary, but a steady observer will agree with me. Certain localities are always "fished out," but that is even local and detracts little from the immense extent of fishing grounds, which are composed of the innumerable bays, channels, shoals and inlets of the river between Kingston and Brockville. I have observed that since 1875 black bass are caught on grounds where, in 1872, not one could be found. I ascribe this not merely to the direct effect of the law preventing netting and unlawful fishing, protecting fish in spawning season, etc., but also to the fact that the public mind has been educated to a more civilized view of these matters. I have frequently seen, and as late as 1874, hundreds of small black bass, rock bass and sunfish lying in heaps on the rocky shore of an island, blackened and decaying in the sun; only one case of this kind has come to my knowledge since. Thus it was that the preacher threw his nets and took not even the little trouble to drop the seine, but I try back into the water.

The "Brook group" of islands, in the immediate vicinity of Brockville, are divided by the navigable channel of the river, and offer, in shoals and small channels, favorite feeding grounds for black bass, maskinonge and the unavoidable pike. At the head of this group, where the river is three miles wide and suddenly forced into small channels, the maskinonge, our "monster of the deep," lies in wait for his prey behind a rocky ledge, under the current, which rushes over it, his head up stream, ready to dash upon any unfortunate member of the finny tribe which the current may bring down into deeper water. Now and then you can see him disperse a school of silvery cisco and behold the water foam from the powerful stroke which has carried him to the surface after his victim. Here, every summer, quite a number of maskinonge are caught, and I have preserved the head of one, taken last October, weighing forty pounds.

West of these islands, and up the river, a lake-like expanse of water meets our eyes, until the Amherst group is reached. Large shoals on both sides of the river give miles of good trolling ground, and especially the shoals on the foot of the Amherst group of islands harbor black bass of good size in July. These shoals, as well as the islands, can easily be reached by stopping from the little steamboats running between Alexandria Bay and Ogdensburg at Allen's Landing. Below the "Crossover" light-house, on the American side, is, as it is called here, down stream to below Oak Point, is a succession of rocky shoals which have given us many a day's happy sport—and hard work.

After middle of July the phantom minnow is most efficient, and trolling, even when using flies, is most practiced. On the Canadian side extensive shoals are found from the light-house up river to Jones' Creek, where a string of five islands separates a fine bay from the channel. Into this bay empties Jones' Creek, and a more romantic and interesting spot can hardly be found on the shores of the river. Before entering upon a description of this part of the river, which is only worthy to be noticed by the sportsman, I will return to the above mentioned Amherst group of islands. These are situated right in the middle of the river and number ten or more, surrounded by numerous shoals and large extent of weedy bottom in every direction, forming the well-known locality for black bass, which are landed here in large numbers, and sometimes three and more islands at a time are occupied by parties from Ogdensburg, Brockville and other places, and their tents by day and camp fires at night frequently attract the attention of the passengers of the numerous steamers and the solitary sportsman.

In the foregoing I have touched upon the different feeding grounds of black bass between Brockville and the Amherst islands. They comprise the shoals and channels around the islands of the Brook group. These shoals are on both sides of the river in that wide and beautiful stretch between the Brook group and the Amherst islands, and largely the large area of rocky shoals and weed beds around the Amherst islands.

The first part of the season and up to end of July bass fishing is always good in all sheltered places, in bogs and around islands and where weed beds are near. After the disappearance of shad-flies the rocky shoals near the steep channels afford better sport. But the black bass of largest size I have always found near the places where food and shelter for minnows collect in July and August are large numbers of small fish. On the rocky open shoals it is very rare to land a bass of three pounds or more, whereas I have to land a bass of five and more pounds near sheltered weed beds, in bogs and on the mouth of creeks. A lady last July landed one small-mouthed black bass of such size as I would have never believed black bass could reach. Its extreme length was twenty-six inches, depth of body over seven inches, and weight seven pounds and two ounces. A rougher than the first, and a little larger, was taken over five pounds and a pickereel (pike perch) of eight pounds. They were hooked by single gut leader and fly-trot. These fish were killed in the last week of July, in a sheltered bay inside of the islands, on the Canadian side of Crossover Light-house. A look on the maps of the river will show that at the Amherst group the river is extremely wide; on the south side Chippewa Bay and on the north side a large bay-like cut, making it about five miles wide, but divided by numerous

islands. This part, from the Amherst group to the Alexandria Bay, is more known to sportsmen in general and will form the subject of my next letter.

SPAWN FISHING AT RANGELEY ONCE MORE.

BOSTON, Nov. 26.

WILL you allow the writer of the article in your issue of Nov. 4 on spawn fishing at the Rangeley Lakes to say a few words called out by two letters referring to his article which have since appeared in your paper?

His position is, that spawn fishing in September or in October of the season of "sportsmen" who do not primarily fish for propagating purposes should not be permitted. And he fully agrees with his old friend "Captain Fred" in his recommendation in your issue of the 25th inst., that nothing but fly fishing should be allowed after September 1. And he further asserts that the case which he referred to in his previous letter was an outrageous action on the part of the holders of a permit from the Commissioners in that the fishing was not solely for propagating purposes, that fish were killed under the license held from the Commissioners and that only a small proportion of the trout so taken by the parties referred to ever contributed to the stock of eggs which were saved, that the object of the licensed persons was to make a big score after the season closed and that they accomplished their object.

He further asserts that he can prove what he has stated, and that Mr. Commissioner Smith, in his letter in your issue of the 28th inst., did not state all the facts, because, as the writer believes, he was ignorant of them, and that when Mr. Smith said the only permits were held by Messrs. Kimball and Stanley he either did not know or forgot to state that other parties fished uninterruptedly in his presence during the first five days in October, and it is to their conduct only that the undersigned referred in his previous letter, well knowing that neither Mr. Stanley nor Mr. Kimball would abuse their privileges.

Having attended his object in calling public attention to the subject the undersigned will continue to discuss the question privately when he receives a reply to a letter lately written to Mr. Smith personally, in which all the facts are stated for his information.

FAIR PLAY.

FISHES, NAMES GET MIXED

MONTREAL, Canada.

DURING several seasons in different parts of Quebec I have taken generally with a spoon what I consider as three different varieties of trout. First is a trout nearly black in color and called *truite noir* by the "habitants" running to large sizes, not so thick and chunky as the gray trout, and not so pretty a fish. Although I had not the two fish to compare I think the eyes of the "black trout" larger than those of the gray. The spots and markings very indistinct and the lateral line not marked; fins black, with red edges; belly nearly black; irides yellowish brown; flesh (of all I got) white, and I am told by the "habitants" this is also the case.

Then there is the gray trout, lake trout, or salmon trout of the Ottawa waters, and the "Tuladi" of Lake Metapédic and Médis lakes and vicinity. Are these latter the same fish? I look up Hallowell's "Gazetteer" and find that they are "mixed." I have asked Mr. Whiteave, mentioned in the "Gazetteer," and he can give no more information on the subject than ordinary mortals, so I turn to you. What are these fish?

Again, I find in the "Gazetteer" "pondpickereel, dorce (Canada), *Esox reticulatus*." The writer first insults our dore by putting him into the pike family, and then says "he is so small and bony that he is hardly worth cooking when caught." Now I want the author to "take it all back," for the following reasons:

First, the dore is not a pike at all, but a perch, and only second to the black bass in that family. Again, he is not small and bony. I have taken them myself of five pounds weight, and know of one being killed in Lake Roseau in Muskoka that turned the scale at ten pounds. Doubtless I could collect more instances of even larger fish being taken. His flesh is delicious. The nearest fish in the "Gazetteer" is the "Pike perch, glass-eyed pike, white salmon, etc., and *Stizostedion americanum*, Girard," but one fish is much darker above and a bright yellow below, as his name implies—"gilded."

That gilded fisherman, the ex-secretary of the F. and G. P. C. of P. Q. at the last "blow out" given by the club called him *Luciperon caudatus*, and some of the members were down on him for so doing.

Thirdly, let me ask what the difference between a pike and maskinonge is? I have asked Mr. W., and he said the first was dark with light markings and the latter had the reverse. The habitants say a maskinonge is striped: "Gazetteer" says, The northern pike, first described by Agassiz, is sometimes confounded with this fish, but may be easily detected, as it has the lower jaw filled with teeth, whereas the anterior half of the maskinonge is toothless."

I have before me the head of a pike that weighed twelve pounds, a pike such as the author goes on to describe. The head is nine inches long from the lower jaw (longest) to the gill, from the end of the lower jaw for a distance of one and three-quarter inches the teeth are, even dry as it is now, but one-twentieth of an inch long, and from this point back on each side are six or seven teeth from one-quarter to nearly one-half an inch long. The upper jaw has three terrible banks of teeth in the roof of the mouth. I have taken a good many pike in a good many waters, and all identical with this, and have to confess, to my shame, that I never saw a maskinonge. Perhaps you can tell me what difference there is between it and the despised pike that has so often appeared at my table or substitute for such in camp?

WASAT.

Only four "trouts" are now recognized by naturalists as being east of the Mississippi River. These are brook trout, *Salmo fontinalis*; blue-back trout, *S. agassizii*; the lake, or salmon-trout, *S. namaycush*; and the siscowet, *S. siscowet*. The tuladi, *S. tonno*, is now included in the third.

The color is not enough to found species upon in ichthyology, and this is the great mistake of anglers in general. It goes for very little because it is not constant. There is a possibility that you have both *fontinalis* and *namaycush*, but the former is subject to great variation in color, from white, through amber and pink, with green back, to almost black and in the case of the large ones going to salt water the spots often become invisible.

The "dore" is not of the pike (*Esox*) family, but is the pike perch (pickereel in parts of Canada), *Stizostedion Rafinesque*, whose name has been restored to replace that of *Luciperon* of Cuvier for the same fish. As the *Esox reticulatus* is a "pickereel" in New York it was a natural error to give this name to another fish called "pickereel" in Canada.

Often the body of the maskinonge is plain olive. In some cases it has large dark oval spots, and in others it assumes the appearance of faint lines. Color, as we have said, is nearly nothing in fishes. The best way to distinguish the maskinonge, *E. nobilior*, from the great pike, *E. lucius*, is that the former has the lower half of the cheek and opercle bare, while the latter has the cheek scaly and opercle-bare. The smaller, *E. reticulatus*, has, in addition to the net-work on its sides, from which it is named, both check and opercle scaly.

THE CATFISH.

BEDFORD, O., Nov. 15, 1880.

Editor Forest and Stream:

DR. E. STERLING is quite right in what he says about the edible qualities of our northern catfish. It is really one of the very best of our many good fishes when properly served up.

The late Prof. J. P. Kirtland, whom nobody knew but to love and respect, gave me a sound lecturing because I did not say more good words about this fish in the first edition of my book. He also gave me the following method of preparing and cooking this fish: "Never take off the skin, but scrape it with a knife, pouring over it hot water, repeating the operation until the skin is as white as a piece of bleached linen; then remove the gills and intestines, leaving the head on, and stuff it as you would a goose or duck, adding to the stuffing, for a ten or twelve pound fish, a little garlic (not Garlic), in quantity about as much as one-fourth of the size of a nutmeg, chopping the clove of garlic fine, and distributing it through the stuffing, then sew up the fish tightly and hold in boiling water by the tail for ten seconds, no longer; then lay it on its belly in a baking pan, and bake it slowly for four hours if you are not too hungry to wait so long, but if you are three hours will answer. But do not forget the garlic, and you will ever after hanker for baked catfish. Try it, and if you cannot get a catfish take some other large fish and serve it up in the same manner. Care should be taken not to put in too much garlic in the stuffing, not enough to give it a distinct odor of it."

In a late number of FOREST AND STREAM, Dr. E. Sterling states that he has caught the black bass at the Saint Ste Marie, which was a great surprise to me. I have fished at that place at different times for as much as six months altogether, with minnows and flies, for large trout. I have fished there in the months of June, July, August and September, and on two occasions I fished there for four weeks, and on two or more times that prince of anglers, Judge J. D. Potter, of Toledo, fished with me, and neither of us ever caught or heard of a black bass being caught, or seen there. I do not make this statement as doubting what Dr. Sterling says in his communication, but it is strange that I never caught any there, nor did I ever before hear of any being taken there.

T. GARBLICK.

AT SAME also has something to say about this fish in a letter on another page, in which he establishes the valuable fact that the catfish is more northern in its range than it has usually been credited.

THE MASKEGONGE.—Cleveland, O.—I will send you a photograph of a female maskinonge (*Esox nobilior*, Cuvier), that weighed fifty-four pounds and was taken in the Maumee River, near Toledo, O., by Judge Emory D. Potter, of the Ohio Fish Commission. The cast of this fish is now in the Kirtland Society of Natural Sciences here. I speared a fish of this kind in the spring of 1842 near the Hones Point clubhouse, on Sandusky River, which weighed eighty pounds. I gave it to a swamper Frenchman, and he took it to a Dutchman, who was satisfied with a mere all-dollor for it. This fish I considered also a "Daniel Lambert" among his kind. The waters of Sandusky Bay teemed with this noble fish in those days, now none are found there except now and then a fingerling (comparatively speaking), which is to be seen in the market. I have at present the mould of a male and female of this fish, which are perfect. The former weighed thirty pounds and the latter fifty pounds. The fish from which these moulds were taken were sent to the city of Detroit, Mich., twelve years ago, and cost me \$15. I very much doubt if the like are to be found in that vicinity now.

E. SPERLING, M. D.

A FISH PARASITE.—New York, Nov. 20.—While fishing in Westchester creek on the 2d of this month I caught a tomcod to which was attached a peculiar parasite, three of which I send you in alcohol with this. They were fastened to various parts of the fish by the root, which you will notice at one end, being firmly attached to the flesh, and the sucker passing through the skin, allowing them to wave convulsively with the action of the waves. When removed from the sucker, the root, or whatever it may be, was filled with blood, as also the pouch to which it conducted, which seemed to form the body, but the feelers were white. The skin immediately around where the blood duct entered the fish was red and inflamed. The fish itself was in good condition and remarkably gamy for a tommy when caught. The parasite seemed to be very tough, so much so that it resisted without injury a sufficient strain to detach the root from the flesh. They have been inspected by several old tomcods who "never see the like afore," at the same time you may be perfectly familiar with them. Please inform me through your columns what they are. Will you at the same time tell me whether it is lawful to set pound nets in the Westchester creek, as I saw one running out from the shore of Pierre Lorillard's estate. The net had a very small mesh, small enough to entrap a quarter pound bass. This may in part account for the scarcity of bass in the Harlem River and the Big Little Neck.

SNARE.

The parasite is *Lernaeonema radiata*, Steenstrup and Luetken. It is figured in Rep. U. S. Fish Commission, 1871-2, Pl. VII, fig. 30, and recorded by Prof. E. A. Verrill in same, page 578, as found in Vineyard Sound. The net is unlawful.

Fish Culture.

ANOTHER ATTACK ON A GAME PROTECTOR.

LAST week we chronicled the attempt on the life of Game Protector G. M. Schwartz, of Rochester, N. Y., by a rifle shot from the shore while he was in the discharge of his duty, and we now learn from the *Syracuse Courier* that John S. Collett, one of the game protectors recently appointed by the Governor under an act passed by the Legislature last winter, left Albany for a trip to Oswego county, having heard that fishermen on the Susquehanna were killing fish in great quantities and in violation of law. He secured the assistance of the Deputy Sheriff of the county, Mr. Mead, and meeting that functionary at Canadilla, the pair proceeded to the little village of Wells Bridge, near which it was understood the illegal operations were going on. While in the discharge of their duty the officers were stoned by the fishermen and narrowly escaped with their lives.

In commenting upon the remark which we quoted from an Oswego paper, last week, the *Utica Herald* says:

"The Onondaga County Game Protection Association is no more deeply interested in this work than any other association of its kind only as far as the enforcement of the law is concerned. The secret of the whole trouble is that county, town and village officials and local game constables around Onondaga Lake, with few exceptions, are as deeply interested in illegal fishing as the poachers, and for years have willfully neglected their duties and winked at the open violation of the law. The people of the State are spending money to feed and support the outlaws and moonshiners who threaten to shoot the State officers. It is probable that they will have an opportunity of testing their bravery, and possibly they may discover that shooting is a game that can be played at by others. It would be a fine judgment on the sharks to withhold all supplies of young fish and allow them to scowp out all the fish within the lake and then starve out the remainder of their days upon its banks. When the next raid is made by State Game Agent Dodge and his men there will be few nets left to work with."

THE CENTRAL FISHCULTURE SOCIETY.

The following circular has been issued:

DEAR SIR: The second annual meeting of the Central Fishculture Society will take place at the Grand Pacific Hotel, Chicago, on Wednesday, Dec. 13, and your attendance is respectfully requested. It is expected that the meeting will be of great interest, as many papers are expected to be read and discussed during the day or two which the society may remain in session.

No list of the papers to be read has been received, but it is usual, for such members as may choose, to prepare a paper on some branch of the subject with which they may be familiar, and all members are invited to do so without further invitation: or, should you be unable to attend, the secretary will read your communication.

Arrangements have been made for reduced rates at the Grand Pacific Hotel, and it would be well for those who propose attending the meeting to engage rooms in advance.

Correspondence previous to the meeting may be addressed to the President, Mr. N. K. Fairbank, 59 Wabash av., Chicago, Ill., or to the Corresponding Secretary, office of FOREST AND STREAM, New York City.

By order of the President.

F. MATHER, Cor. Sec.

PISCATORIAL PIRATES.

Under this head the *Syracuse, N. Y., Daily Courier* gives an account of the lawless fishermen of Keuka and Seneca lakes, to which we referred last week and from which we extract the following:

It is a lamentable fact that the lakes of Central New York are raided by lawless gangs of pirates who care naught for the laws or legitimate sport. This is the spawning season, but the piscatorial pirates seem to be intent on depleting the waters and leaving them barren of their finny populations. These buccanniers snap their fingers at the statutes and bid defiance to the officers. In not a few instances they pursue their vocations armed to the teeth and threaten to empty a charge of lead into any one who interferes with them.

Thanks to the efforts of the *Onondaga Fishing Club*, the illegal fishermen have learned that they can draw their seines and set their gill nets only at their peril. Game Constable Travis has a sharp eye for the malefactors, and it is seldom that one escapes him. The waters are rapidly becoming stocked, and it will not be long before as fine sport can be obtained on the Onondaga as on any lake or river. Last summer the fishing was finer than for ten years.

The Seneca river suffers from the predatory operations of the robbers, but it is hoped that before long they will be made to answer for their transgression of the law.

On Skaneateles Lake the pirates carry on their unlawful work in open defiance of the law. In the vicinity of Glen Haven the water is lighted up at night by a large number of jack lights. The fishermen are rapidly depleting the waters of the fine trout for which the lake is noted. The robbers threaten vengeance on any one who interferes with them or makes complaint against them. The people living on the lake hardly dare say their souls are their own owing to the reckless acts of these nocturnal fishermen. This is a splendid field for some daring officer.

The people living in and about the adjoining towns have endeavored to stock Oswego Lake but the pirates have resisted their efforts by robbing the lake, lured and outwitted. If the robbers are allowed to continue their work Oswego Lake will never be known as a fishing ground.

On Oneida lake it is well known the poachers are up in arms and defy the law. A short time ago their nets were raided by State Game Constable Dodge. This aroused their ire, and they now patrol the beach along the fishing grounds with loaded guns and swear they will kill any one who approaches. There is little reason to doubt their threats, as they are lawless in their habits and a bold set of rascals.

WHITEFISH CULTURE ON THE DETROIT RIVER.—Very good progress has been made in stocking the lakes with the whitefish, *Coregonus albus*, by depositing the fry at the great natural spawning grounds in the Detroit River. The *Essex Record*, of Windsor, Ontario, recently said:

"Every day we hear of fresh evidences of the great goodfaced by the establishment of the fish hatchery at Sandwich. The main bulk of the white fish taken this season are of an average weight of a pound and a half each. There are hardly any old ones taken, showing beyond a doubt that the hatchery has provided the catch, and that but for its having been put into operation white-fishing on the Detroit River and connecting lakes and rivers would by this time practically have become a thing of the past. So long as the catch was made up largely of old fish it was difficult to convince skeptics that the fry turned into the river each spring survived the dangers of young fish-life and returned to the place where they first took water; but now can find a reason for disbelief. Not only is the existence of the fish unquestionably due to the hatchery, but their numbers are immense—just what we and others favorable to the enterprise at the outset predicted they would in a few years become. Even in parts of Lake St. Clair where a white fish had not been taken for a long period, they are now quite abundant. All that is necessary to bring back the old-time big fish-harvests here and consequent cheapness of price to consumers all over the continent, is to work up the fish hatcheries to their highest capacity. The matter of supply is entirely in the hands of the authorities."

CHINESE AND OTHER POACHERS IN CALIFORNIA.—The *Sonoma Union-Democrat* says: "Quantities of dead fish are frequently seen on the Stanislaus River at or near Reynolds' Ferry. The belief is that giant powder causes their destruction. If such be the fact the parties engaged in the nefarious business should be hunted out and punished as the law contemplates." The *Tuolumne Independent* says: "Reports reach us from various sources that at different points on the Stanislaus River, along Reynolds' Ferry, Chinamen are killing and taking fish in violation of the law by the introduction of medicated bait and blasting with giant powder; and furthermore are obstructing the passage of fish to the upper waters of the river above named by constructing dams in the operation of mining their claims. White men are also taking fish in these waters by unlawful means. We are informed that the salmon are quite plentiful in the upper waters that have passed the fishways at Knight's Ferry dam; therefore it is to be seen of what vast importance to this part of Tuolumne County the construction of a fish ladder at that place has proved."

A DONATION TO THE CAPE CLEAR FISHERMEN.—The Baroness Burdette-Couts has taken a great interest in the fishermen of Great Britain and Ireland and has made them several charitable bequests, as well as having built a large fish market in London, which, however, was never occupied, as the dealers would not leave old, cramped and uncomfortable Billingsgate. This truly good lady has just granted (that is the word used for her gifts) the Cape Clear fishermen the sum of \$14,250 to help them start again in business after the disastrous season just closed. This swells her bounties to the fishermen alone to the princely sum of half a million of dollars.

UNLAWFUL BASS.—*New York, Nov. 25.*—I saw in a fish store in Harlem a few days ago a string of striped bass, not one of which would weigh over a quarter pound, and have seen small bass for sale in many other places down town. What can I do to prevent their sale without appearing personally in the matter? What is the price of the "U. S. Tide Tables," of which you speak in the FOREST AND STREAM? SHADDO.

You may complain to the nearest Game Protector, who must prosecute. Apply to Thomas Manning, 53 Beaver street, New York, for the tide tables.

CARP FOR TENNESSEE AND ARKANSAS.—Mr. J. F. Ellis, of the United States Fish Commission, recently delivered one thousand carp to Judge W. W. McDowell, Memphis, for distribution in Western Tennessee and Arkansas.

Game Bag and Gun.

OUR PHILADELPHIA LETTER.

IN the Southern portion of New Jersey there is an extent of country, especially in the counties of Atlantic and Burlington, covered with extensive growth of scrub oak and dwarf pines, which has long furnished an excellent harbor and range for deer, and although they do not exist there in any great numbers it is of very common occurrence for parties going out properly equipped in the hunt to bring in one, two or three fine trophies of the hunt.

We have been on a recent deer hunt, and must confess it is a very tedious, if not unsportsmanlike, affair. A party of this kind is composed of anywhere from five to fifteen men, all armed with double-barrel shot-guns loaded with buck shot. Every point where the deer is expected to pass (it is all guess work) is guarded by a gun, while one or two of the party make the drive with the dogs. Purely-bred hounds are seldom used, and I have seen single, half-pointer and bound terriers, beagles and the thoroughbreds making up a pack in one of these Jersey deer hunts. The drive is generally a short one, and one section being "drawn blank," a second and even a third and fourth is tried. When a deer is killed the carcass is divided, and as the party is generally a large one, a small portion only falls to the share of each. Your correspondent has made a vow never to go deer hunting in New Jersey again, for it has always been my luck never to have either buck, doe or fawn come my way or pass my net. In fact, but two deer were ever killed in my numerous hunts I have been fortunate or I should say, unfortunately enough to have attained. There is too much "needle in the haystack" chance in them for me.

Very many deer from our own State are coming into market and a plentiful crop of mast is reported; in fact there has been a great growth of beech trees all over through our forest counties, which accounts for the number of wild pigeon exposed for sale at our game stores.

A very remarkable scene was witnessed on the Hawley branch of the Erie Railroad last week. This branch runs from Hawley to Lackawanna, Pa., a distance of fifteen miles, passing through a very wild section of the State and winding its way along the course of the Lackawanna River the entire length of the road. The other day as a loaded coal train was moving under full headway three large deer bounded from the woods and leaped upon the track. They stopped, looked at the coming engine, and then like a flash darted down the track a few yards in advance of the train. The engineer increased his speed considerably, and at short intervals

the engine whistled, when the deer would toss their heads defiantly; but in spite of the efforts of the engineer he was unable to overtake the animals. The race continued for over three miles, when a man who was walking up the track frightened the deer from the rails, and they leaped to the embankment to the Lackawanna River, which they crossed, and disappeared into the mountains. The engineer fired several shots at them from his revolver as they ran down the track, but they apparently escaped untouched.

We met Dr. Twaddell at Rider's this morning and learned of the great sport he had in Maryland with his beagles, Blunder and Melody, eight hares having been killed during the trip. It is not generally known that the marsh or black-footed hare of the Middle and Southern States makes a much better run than the common variety of "cottontail" which is found near timber and frequents the upland more. It was the little black-footed fellow that afforded the Doctor and his party so much amusement, and the runs made, he stated, were astonishingly long and quick; few hares escaping excepting those that "holed." The portion of the company that devoted their time to the quail found the birds abundant and the coverts full.

As I wrote you would be the case, now that we are having a full touch of cold weather, the noise of grouse shooting through our State has become better. The birds are seeking the valleys along water courses for shelter, and are being found there. More canvas-back ducks have been killed this week at Havre de Grace than since the opening day of the season, but they are not by any means plentiful. From parties that have returned from the New Jersey coast we learn that the brand too not stool well, and many Canada geese pass "right along high" without stopping or paying the least attention to the decoys. We imagine that the numerous immense hotels that have been built on the narrow strip of beach which separates these inland bays from the ocean, has the effect of frightening the fowl. We have frequently seen flocks of both geese and brant, when coming in sight of these barns of buildings, to "climb" right up into the air and continue their journey southward without touching, when it was evident they would have alighted to the stools had they not been driven from their course by the buildings. Homo.

EFFICIENT METHODS OF GAME PROTECTION.

THE WEST JERSEY GAME PROTECTIVE SOCIETY.

I HAVE been reading with considerable interest in the late numbers of your paper the articles written by yourself and others in regard to the protection of game and the formation of game societies, and I should like to add a few lines of my experience for the last six years, both as one of the committee on the purchase of game and the committee on policing and prosecuting violations of the game laws of the West Jersey Game Protective Society.

I intend in order to protect the game successfully the proper laws must first be passed, and, secondly, there must be pluck and nerve enough to enforce them, otherwise they are a dead letter.

We see in your columns the formation of numerous game societies throughout the country, but fail, except in rare instances, to see that they ever achieve anything, and in the course of six months they either go out of existence or dwindle into a pigeon-shooting club, the very reverse of what they were formed for.

This arises from various reasons. A want of funds is no doubt often a stumbling block, and when such is the case it is to be deplored. But too often it arises from an apathy and selfishness upon the part of the members, who are unwilling to give the time and trouble necessary in seeing that the laws are properly carried out. It is surprising to me to see how many intelligent men who shoot who will not even take the time to inform themselves upon the objects, letter and spirit of the game laws, but rush madly into print and condemn the very laws as unconstitutional which two weeks before they considered right and proper.

There is no doubt that the people of this country have to be educated up to a knowledge of and a proper respect for the game laws. This, however, is being done rapidly by the sporting papers of the country, and I know of no one who deserves more credit in this respect than the Game Protective Society of New York. With plenty of money, integrity of standing and purpose, backed up with nerve and most able counsel, they pushed their cause to the courts of the last resort and the country has been thus given a line of decisions which not only placed the standing of the game laws upon a proper footing, but also put to flight the curlstone lawyers and the unconstitutional letter writers.

The first duty of a game protective society is to employ a lawyer of good standing, who will examine the game laws of the State and post himself upon the laws and the decisions of the different States. Let him then, under the directions of the society, frame the game laws which they intend to present to the Legislature. If this is done the society will find, when the time comes to prosecute their cases, that the offender will be unable to escape by any quibble, and that the Court itself will not be in doubt as to the meaning of the phraseology used in the act. To have an offender arrested with all the evidence against him, and yet to allow him to go off by the insufficiency of the law, is the very worst thing that could happen.

The next step should be, after appointing a police committee, is to get an intelligent solver and industrious officer. This individual is a most important person, as upon his intelligence and ability will depend the successful termination of all suits. The officer should be supplied with an official paper setting forth his appointment, and should also be supplied with blanks drafted by the counsel of the society. Most of the justices of the peace before whom the offender first comes are so ignorant as to be unable to draft the papers properly, and in the event of an appeal to a higher tribunal the cause will rest at the consequence of the want of capacity of counsel.

Then let the laws be printed in book and card form, and printed in the papers, so that people may have every opportunity of reading them, and be distributed wherever they can. Solicit the aid of the railroad companies, and get their permission to post your cards in their depots. Show them they are liable as common carriers in violating the game laws. When you suspect persons of shipping game out of season, use your search warrant freely, and go through the depots, freight cars, or any other place that you have good reason to suppose harbors game of some kind. Of course this must be done in the proper legal way, and with good reason (which is supported by affidavit), that you have cause to suspect the person of violating the laws. The railroad companies are always ready to help you, and you can get them to issue an order to their employees that any one know-

ingly violating the laws in shipping or receiving game out of season will be dismissed from their employ.

Let it also be known that upon any person giving any information of any violation of the law by letter to the secretary of the society that the case will be prosecuted without dragging in the informant in any way. It will soon be found that a vast amount of information will be obtained which otherwise never would be heard of. In this way your detective can go quietly to the spot where the violation has been committed and work up the case, and the society as a body becomes the prosecutor and the salaried officer the informer. I say salaried, because if he is so it can make but little difference to him whether the reward is paid or not, and it puts him before the community in a better position than a mere informer trying to convict a person for a reward.

By thus adhering strictly to the law, and using good judgment when a case should or should not be prosecuted, it will not be long before the violations of the law will be few and far between, and the countrymen generally respect you for your good efforts.

I contend that no society has done more for the protection and propagation of game, and certainly no society ever had in the beginning greater enemies than the West Jersey Game Protective Society. But by persistently adhering to its rights and enforcing the law without fear or favor, I think I can truly say that it now stands for integrity and ability beyond reproach.

There are still some grumblers who find they cannot shoot out of season, who stick to the old state argument that the law is unconstitutional. As I wrote a long article in November of 1876, which your paper kindly printed, I do not intend going over the ground again, but should any of your readers wish to inform themselves they can either write to you for the information or read the case of *McClurg vs. The State of Virginia*, 4 Otto Reports, where the subject is discussed by the Supreme Court of the United States. I would also recommend your correspondent, Mr. J. H. Griffith, to read the above case and the decisions printed in your paper in 1875 and 1876, and given by the New York courts, upon the right of State passing game laws, and the property of the game at large belonging to the State. The prosecutions by the society have been numerous to mention, but they have always been successful, except in a few cases.

I believe we now have, since the law is understood by the farmers, their support. The arrests for trapping and snaring have been numerous, but in every case successful. The trapping is now in a great measure stopped, and I hope in next week to make some four arrests which will completely break it up in that particular section of country.

If the officer employed will make a stay of a week in that particular section of the country where the trapping is done and make all his arrests at once it would completely break up the practice there. To attempt to arrest the game sellers for handling trapped game is impossible, as it can never be proved that the birds were trapped except by picking them, which of course no game seller will allow. Let all sportsmen adhere strictly to the law. Let them inform secretaries of the different clubs of the persons who are violating the laws and their residences, and if they will not appear on the witness stand themselves let the secretary send his officer to the place and work up the case.

A farmer who violates the law to-day will do it to-morrow, and you will almost always find him out. Let all sportsmen be civil when ordered off a farmer's land and do not let them claim the right of shooting on any one's place without permission, and it will not be long before they can shoot wherever they please, unless he be a very ugly character.

I have written this article with the hope that it may be of some benefit to gentlemen who propose enforcing the game laws, and I can only add my hope that they will be as successful as we have been. A MEMBER.

We want the name of every sportsman in New York City, and in other cities, who thinks that he can afford to pay the farmer's boy something for preserving the quail for him to shoot.

ROUGHING IT AMONG THE DUCKS.

BY A VETERAN.

BEFORE the terrible storm was well cleared away, my brother and I started Thursday evening. That night it cleared away cold, with a gale from the northwest that blew great guns all that night and the next day. When we got up in the morning we found the ice had formed rapidly in the pond and seemed to make faster after sunrise, spite of the high wind. One of our company thought no boat could live in the pond, and said no one but an Esquimaux would attempt to launch in it. But my brother and I saw about 200 fowl in the middle and made up our minds to try it. The thermometer was nearly zero, and after getting our little skiffs clear of the ice, a task of about half an hour, we found every wave put a coat of ice over boat and rower; still we started for those ducks, and meant to have a "whack" at them any way. Heading our skiffs off before the wind we went down upon them like arrows, about a good gun shot apart.

Coming near enough we gave them two barrels each in the water and as they rose, loading quickly, gave them right and left as they passed. Picked up dead birds from the first volley, seventeen. This was better than we expected, for the wind raised the water, and we were expected to be very unsteady. Then too, the wind would not let us stop where the birds rose from, but away we went to the leeward side of the pond, where we were soon in difficulties among the cakes of ice rapidly solidifying. Besides the birds we picked up others came down among the little cakes to the edge of the pack ice, and the pack made around them so fast we could not reach them, as our skiffs could not penetrate it. Nor was it strong enough to bear us. There came a flight of one-half or three-quarters of an hour getting clear of this pack and back to the windward side of the pond. Our boats and our bodies were sheets of ice, and as I found gloves in the way and went bare-handed, my hands were nearly frozen. After a little rest we paddled to a point to windward of the ducks for a second rally. Although many went out of the pond into the ocean and did not come back, others did come, for it was so rough there. Again we came down upon the birds. This time they did not wait for us, and we had to start in a few minutes. Result of second rally, fifteen ducks. Again we worked up to the windward shore. This time I found so much ice in my boat and on her that she had to be pulled out and cleared off it. Also, toward

the latter end of the rally, there was so much ice on my coat—fully half an inch I should think—I could hardly get my gun to my shoulder, and when I did the butt slipped up or down on the ice of my coat, so as to be very unsteady. The ice on my musclete, too, was very uncomfortable, and on my eyelids it was most annoying. But I had to have one more crack at them. So my friends broke the ice over the buttons of my coat until we got that clear. Then I was going to try them in my shirt-sleeves, but my friends insisted upon my donning an oilskin coat, so with that we started a third time.

My brother got two. I snapped six times at capital shots, but the ice was so thick over the firing pins of my gun that the cartridges would not explode. Opening the gun to fix them, I could not get it shut. Then, coming into the drift ice, I came so near not reaching clear this time that I thought when a man's gun was frozen up he had better not try to shoot any more. After a desperate effort we got ashore again and then we quit. Result of the three rallies, eighteen broadbills, a bluebill and a widgeon for my brother, eighteen broadbills for me. You see we shoot very nearly alike, and there is much generous rivalry between us. My brother then took the guns in the house and cleaned them. I dismounted the boats, got them, the oars, the game, etc., safely housed and packed, and then we changed our clothes, had a capital dinner, and home we came. I never had better fun or more excitement in my life.

Our heavily-laden wagon broke a spring coming home, so we came but slowly, otherwise no calamity befel us. I find myself suffering ever since with my hands, because of my indiscretion in leaving off gloves. The ends of my fingers are numb yet, five days after the event; the skin has broken in three places on my left thumb, and the whole top of my right little finger has risen in a water blister. But I will go through the same experience again for the sake of another such day. The exhilaration was such, as I fought the waves, I found myself shouting with exultation at every stroke, and no one could hear me for the roar of the wind. I was a boy again, and know I shall be a better business man for the year to come, until I can get another such day of recreation.

Next day a boy went out on the ice which had formed, got eight frozen in, dead as we left them, and I think the same number of birds were shot out of an air-hole. Considering the weather our score was good.

It was our last chance; the fowl are all gone. If it had not been for a misunderstanding we should have been there Wednesday—my friend was there we found afterward, the day appointed. There were more than 1,000 birds there that day. It was a flat, calm and lowering and I believe we could have bagged 1500 fowl. It was a pity, for the larger part went out on the ice of Thursday, but I used to take great sport as it was, and better than any other I have had, so I think I have failed to do heretofore this fall. I used to discount my brother. Up to this last excursion he has beaten me shamefully this fall. This day the quality of the shooting was a little in my favor again considering the misfires of my gun. Once or twice I took a bird from one flock passing to right with one barrel; one from a flock passing to left with the other. As these birds fly faster than any swallow or quail it is a fine feat.

Our boats are especially constructed for this purpose. My brother built them. His is ten feet long, three feet wide and one foot deep. Mine nine feet, nine inches long, two feet nine inches wide and ten inches deep, otherwise they are just alike. By this arrangement of sizes his sits in the wagon body, mine fits inside his. We put a seat across mine, load in our equipment, hitch up the horse, and away we go to any pond where we hear there are birds. The boats weigh about sixty pounds each, and are so light that a gentleman who sometimes goes with us has one just large enough to hold my brother and when he goes along his boat sits in the wagon and ours are placed in his. I will describe my boat, which description will answer for all, though the internal arrangement of each is made to suit the owner and user.

The sides being sprung—they are made of $\frac{1}{2}$ in. white pine—and secured to the stem and stern board, and the braces in place, the bottom was put on. The first covering was of $\frac{1}{4}$ in. cedar, carefully put on, and copper tacks to the braces. This was well coated with lead paint, and while wet, heavy, close woven drilling was stretched over it. The drilling was then well painted on the outside. Before this was quite dry, another was put on, filling all the spaces in the threads of the cloth with paint. Over this painted drilling was then put another bottom of one-quarter inch cedar, and the bottom protected by strips one inch wide, running lengthwise of the boat, six inches apart. This made a light skiff with a round bottom, and after four years service, not a nail, nor a board. The sportsman sits in the bottom, and is so very low in the water. The boat is fitted with patent bow facing oars, so one can watch his game as he rows up to it; and with his cocked gun lying between his legs, the muzzle elevated by lying over a bulkhead, B, so arranged that he can paddle almost up to his game, approaching them from the windward. They always rise against the wind, so start toward the boat; then as they pass, drop the oars, swinging the gun up, and aimed at the game, it toward the game, up with the gun and let them have it right and left. At the sportsman's right is an open topped box, containing his loaded cartridges, which can be shored under the thwart if it is very rough, or there is rain. The bulkhead serves a double purpose of keeping the muzzle of the gun elevated, and making a space in the bow of the boat to throw the game to keep them out of the way and keep the boat clean. It is now so simple to pack in packing boxes. My brother has none in his, his gun lies in the bottom. Last year an accidental discharge sent 13 oz. No. 2 shot through the bow of his boat, and he came near having a swim ashore. As it is always cold when we go for broadbills it is very uncomfortable taking them out of the icy water with the hands after they are shot. So beside the right leg of the gunner lies a short-handled landing-net to lift them. At the time of our last frolic the water froze over our nets each side, and we dipped out in packing boxes. The solid ice, were so heavy we could not use them, and the first birds, heavy hands had to take their place. That day I used a Remington 12-bore 9½ lb. gun, loaded four drams powder, and an ounce of No. six shot. It is a cheap gun (\$50 new), but is the best shooting, best balanced gun I ever shot, with the bestliest, most aggravating breech-opening mechanism. There are so many pieces it is constantly out of order, and so much of it on the outside, the old thing froze up solid. That part of the bird, or good duck would be the worst. I think there is nothing further to say, except that I have since been told that the dead birds and cripples picked up the day after our battle were twenty-two instead of fifteen, making the total score sixty.

Seacoast of Conn., Nov., 1879.

T. R. L.

GAME AND FISH CHAT.

A FEW items of Quebec news I can give you of the past fall. Most of our game has for some unexplained reason been unusually scarce; there have been but few, I suppose, and ducks have been small in consequence, and in the markets high priced ruffed grouse are scarce; but this state of things is easily accounted for, they are snared almost to extinction under the vile law that allows of hare snaring, and this state of things there is no remedy for unless it is the repeal of the law. But few large ducks have come in, and most of the kinds in market are green and blue winged teal, buff heads and blue bills. Geese have not been so scarce for some years, and a few have been brought in, but I am happy to see, are getting scarce, and if there were none at all our ruffed grouse would benefit by the loss. We have had a mild and pleasant season, no snow of any account until within the last week. Some vessels in the harbor loading yet. Caribou hunting will very soon be in order; it only requires about eighteen inches of good snow with a good hard frost, and everything is ready. Everything promises well for the sport, so much for sporting notes.

I see in a copy of the *Forster and Spruce* of Nov. 11 that Dr. Sterling in an article on the catfish says: "The extreme northern range of the catfish is, you may be certain, Lake Erie." In this I beg most politely to differ with him. During the summer of this year (1889) while on a trip to the Northwest I caught over twenty of these fish, varying from ten to twenty-five pounds, in the mouth of a small river running into the Red River of the North, near the village of Itasca, in Minnesota, while the Green Winged teals they are one of the most common fish in those waters. They seem to be of two varieties, one a black, unpleasant looking fish with a body small in proportion to the size of the head, the other longer, better shaped, with smaller head and mouth, and yellow in color. I am not sufficiently versed in fish lore to know if they really are different varieties, or whether they are only male and female of the same kind. One thing I do know, that as a table fish they are second to none of the common fish of the Northwest. I caught them with small green frogs, and in one instance took one with a spoon while trolling a rod from the bank for pike. By the way, in the Northwest they reverse things as regards the pike family. The fish called in all parts of Canada pike are there called pickerel, while the pickerel of Upper Canada, and the "dore" of the Lower Canadian French is the same fish as the wall-eyed pike of Minnesota or Dakota.

They get names mixed up here in the game line as well as the fish. In northern Minnesota and Dacotah, as well as in Manitoba, there are no prairie chickens (*Tetrao cupido*). There are plenty of what are called chickens, sharp-tailed grouse, (*Tetrao phasianellus*) but the chicken is only found where civilization has come in and cultivated the ground to a certain extent. They are plentiful, I believe, in the southern portion of Minnesota, but in a three months' trip in the northern end of the State I never saw a head of one. Ruffed grouse (*Tetrao canadensis*) are fairly plentiful wherever woods are found, while in the eastern portion of the State ptarmigan will most probably be found, as well as the spruce grouse (*Tetrao canadensis*).

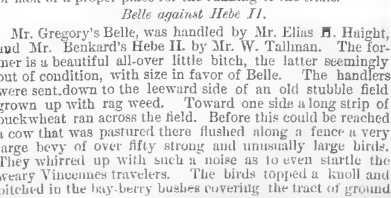
Your correspondent, who says that beaver are the first animals to fly before civilization, has most probably been looking for them near Chicago, New York, or some of the other large cities. Let him come to Canada and I will show him colonies of them and their dams within five miles of a town of 10,000 inhabitants, and the beaver have there started their settler began his clearing. They do not decrease, but increase to such an extent that three years ago men were employed to trap them off, as they spoiled the roads by undermining them until they fell in. They are also fairly plentiful in Muskoka, in any of the back parts of Lower Canada, where they are unnecessarily persecuted, and in many places in Ontario, in spite of all the civilization that comes in. Wherever they are found they are hunted and trapped ("in season") and still the beaver on our islands show no signs of clearing out, and I am sure if they were let alone for, say five years, they would be as plentiful at the end of that time as they were in early days. They are a very productive animal, and their perseverance in building and maintaining their dams in good order is almost unbending. It will be a long time yet before the spirit of the last Canadian beaver will be gathered to his fathers if they do not disappear any faster than they are doing. AT SATBLE.

A PROPOSED CLUB.

NEW YORK, NOV. 27.

Editor Forest and Stream: I HAVE just read your "Proposition to Gentlemen Sportsmen" and have much interest, and I must confess to considerable satisfaction, although of a rather inverse order, because several years ago I foresaw what is now patent to every one, and tried to inaugurate an experiment, which, had it not the success it warranted and been generally adopted, would, I think, have done much toward saving the game of the East, and would certainly have put the farmers and "gentlemen sportsmen" on a plane far from four feet square. Some years since I saw that unless a more fond of rod and gun had a full purse and, as is more unfortunately the case, abundant time at his disposal, his chances for having anything like a reasonable return for his outlay of time and money in pursuit of his favorite pastime were of the "slimmest" order, and having found from a little experience of a rather expensive kind that colossal preserves after the nature of the Blooming Grove Park Association were impracticable, I conceived the idea of organizing a club of "gentlemen sportsmen," who, like myself, were so situated that they could not leave their business for a month at a time, and who would be willing to subscribe toward hiring from the farmers the shooting privilege over their farms.

It seemed to me entirely possible to form a club of twenty gentlemen, to subscribe \$25 each, which would be \$500 per annum, for which they ought to be able to obtain the shooting over enough land to secure a couple of dozen birds in a day's sport, if properly stocked and preserved, and this within easy access of home. They would in the first place have to stock and post the land, the farmers to see that no trapping or shooting was done over it. The farmers would certainly make more out of the rent paid them than they could get for a few illegally trapped birds, and if, as is likely would be the case, the club would board with them when down, they ought to do decidedly better, besides being free from the annoyance of having their birds over by Tom, Dick or Harry. Long before this instance, combining as it does what were once good trout streams, facilities for ocean and bay fishing, good woodcock, quail and grouse cover and points for ducks and bay birds, could be made available to New York sportsmen. I



beyond, which lay on the north shore of the island. Belle, on approaching the spot where the birds had moved from, had a remaining brace of birds flushed, and she dropped to wing. In proceeding to where the birds had been marked down Belle straightened herself out and pointed hesitatingly on a small fresh rock which some birds had just left, but she was uncertain and rooded on. Hebe was sent to the fore, but the rover was too thick to work the dogs in, and some grassy patches were tried. Tallman ahead of his puppy flushed a single bird, and Hebe dropped to order. Belle then, having the point, pointed staunchly stern well up and straightened herself out. At order she drew on grandly reminding one of the old sort, and after rooding about twenty yards the bird which had been running flushed of itself. Belle was given the point, which she deserved thoroughly. Warning to her work she showed form and grand style. Further on a bevy was moved by Tallman, and at the sound of its taking wing another bevy flushed where Belle had first taken up the trail of the single bird. All of these birds were proclaimed to be natives, as the three hundred imported birds from Illinois had been planted in another section of the scrub. As the second bevy scattered in a narrow strip of scrub oaks near the beach, both birds were swung around to the leeward of the patch. On the outer edge Hebe pointed and the birds were flushed and shot at by Tallman. One bird started for the main land, but tired out and fell in the water. Hebe was then put on some birds, and Rover a moment later pointed, and the brace was ordered up at 9:54 A. M., after being down just half an hour. Belle was awarded the heat, provision being made to have her back later on. Certainly over 150 birds had been moved on the range.

Rover against Jennie II.

Mr. Raymond's Rover was put down, a large, leggy pointer, with good head, being handled by Mr. G. H. Newton and Jennie II. by her owner, the latter being a tiny set infant. In same part of ground the start was made. Both dogs at once pointed on separate birds, being somewhat apart. The handlers were ordered to flush and kill, but both birds escaped. Jennie dropped to order, but Rover held his point, and later a bird was flushed in front of him. Under the circumstances this performance was worthy of high rating. The brace was then given a spin in the old stubble field, the little bitch moving quite sharply, while Rover measured off the ground with a slow rolling lope. Back to the bay-bushes the brace were sent, and in the scrub-oaks Rover made a rattling point, head well up and turned to one side. He was staunchness itself, and stopped where he was until Tallman, in cut-and-mouse-like manner, could convey his little bitch in sight for her to back. She was allowed this, we think mistakenly. Jennie was then put on some birds, and Rover gave her a chance to back her, which he failed to do. The judges then requested the handlers to establish a point to enable Belle, winner of first heat, an opportunity to back, the brace, for the time, being relieved from penalty should flushes occur. Rover found and remained staunch on point and bevy was moved. Jennie, upon reaching place where bevy pitched, pointed excellently, and Rover, who was ascending the hill-side beyond, caught sight of her and backed grandly, thirty yards away. Belle was then ordered up and allowed a back. The brace was then ordered up at 11 A. M., after being down forty-five minutes. Jennie was awarded the heat, which, we think, should have gone to the pointer. He had shown a good nose, unusual staunchness and his backing above described was first-class.

Queen against Belle.

Queen, who had a bye, handled by Mr. Tallman, and Belle, winner of first heat, handled by Mr. Haight, were put down for the second series in a thick lot of scrub-oaks on the hill. Belle at once pointed, drew on and stopped, rooded for some thirty yards and pinned the bevy, which had been running. The birds were flushed by handler. Belle continued to rood on successfully, the bevy being driven up and back. Tallman then took the bevy. Queen up to this time had shown no disposition to work, and at 11:20 A. M. after brace had been down ten minutes, the dogs were ordered up, Belle winning the heat. A breeze began to freshen up, and the sun coming out made it a perfect day for working dogs, and really the sport was most enjoyable.

Jennie II. against Belle.

At 11:30 Jennie II. and Belle came together in the same patch of scrub-oaks. Jennie almost immediately pointed in grand form and Belle backed. The bird was moved. In leaving the brush Belle was very far before us. We had reached the top of the island, before spoken of, as resembling Montauk. The rolling hills, cut between with gulches, spread out from our feet as we stood on the highest point of the island. In the hazy background stretched forth the larger bay, hemmed in by blue hills and steep, sandy slopes, while above us the white clouds caused the autumnal sun to light up only a broad strip of the bay and the marsh land. The hills were drawn blank, and at 11:45 A. M. the brace was ordered up, the heat going to Belle, making her first prize winner and leaving Jennie II. second. Belle, the winner, is the first of the Sensation strain ever run in this country.

An adjournment was now had for luncheon and the field was not taken until an hour later.

Hebe against Rover.

Hebe and Rover, same handlers, were put down on the rolling ground west of the house. Hebe at once warned up and showed good style and clipping pace in the open, outrunning her large companion. The hills were drawn blank, the imported birds having moved their location. It was not until three-quarters of an hour had been consumed that a feather was seen. The beat had been directed to the south part of the island, and at last the long-lying bevy was flushed from the brush land. They scattered like birds and stretched several hundred yards away along the high slopes on the east shore. In some longish grass there they were found and both dogs flushed. Rover made a careful point on some dry leaves and the birds were flushed by the handler. In a washed gully he tripped over a brace, which were somewhat wild, and Hebe followed suit with two flushes. The dogs were then ordered up and the heat given to Rover, after being down an hour and twenty minutes.

Rover against Queen.

The finishing heat lay between Rover and Queen, but as the latter again showed no push, Rover was awarded the third money.

The boat was soon reached, and 3:20 P. M. saw the party back at New Suffolk.

The first day's sport passed off smoothly. The weather was fine, and the running of the youngsters fair.

In the evening a meeting was held at the New Suffolk Hotel, and President Aten, as chairman, congratulated the club on the successful termination of the first day's running. Mr.

Washington A. Coster, of Flatbush, L. I., was appointed Steward in place of Mr. Hecksher, who was obliged to return to New York. The entries then closed in the Puppy Stakes, with the nominations noted below.

PUPPY STAKES.—Open to all pointers and setters under 18 months of age. Limited to 25 entries. First prize, \$100; second prize, \$50; third prize, \$25; fourth prize, \$15. Entrance fee, \$15; forfeit, \$10. Closed November 29, 1880, with eight nominations, out of which there were six starters and two withdrawals.

ENTRIES.

J. O. Donner, New York City, white, black and tan setter bitch puppy Jersey Queen (Ranger II.-Silk), 14 months.

A. E. Godeffroy, New York City, white and orange setter bitch puppy Daisy (Ranger II.-Silk), 13 months.

H. W. Livingston, New York City, lemon and white pointer dog puppy Baronet (Rush-Rose), 1 year.

D. S. Gregory, Jr., Jersey City, N. J., lemon and white pointer bitch puppy Belle (Sensation-Grace), 11 months.

W. Tallman, Brownville, R. I., white and black setter bitch Jennie II. (Scranton's Patch Jennie), 8 months.

Max Wenzel, Hoboken, N. J., closed Irish setter dog puppy Chief (Berkeley-Duck), 15 months.

John C. Higgins, Delaware City, Del., white and lemon ear setter dog puppy Lincoln II. (Lincoln-Petrol II.), 15 months. Withdrawn.

W. Buckingham, Norwich, Conn., unnamed pointer. Withdrawn.

SUMMARY OF THE DRAWING OF THE BRACES.

Tallman's Jennie II. against Livingston's Baronet.

Gregory's Belle against Godeffroy's Daisy.

Donner's Jersey Queen against Wenzel's Chief.

(By Telegraph.)

SECOND DAY.—NOV. 30.

MATTITUCK, LONG ISLAND, DEC. 1.

The morning broke bright and clear, and throughout the day the weather was perfection. A rather fresh breeze was blowing from the northwest, and at 8:30 the party of yesterday, increased by many new arrivals, took the little steam yacht Psyche and started for Robins' Island.

Jennie II. against Baronet.

Arriving half an hour later, the first brace were cast off at 9:10—Jennie II., handled by her owner, and Baronet, a fine little pointer, handled by William W. Thrus, Crookville, L. I. A cornfield was drawn blank. Jennie, knowing herself to be a good ranging and fast-going puppy. On approaching the hayberry-bush field the judges flushed a bevy and Baronet dropped to wing and Jennie to order. Jennie then pinned a bevy and pointed staunchly, but as the judges were intent on following the first bevy, the point was not scored in her favor. On following the bevy, both dogs flushed it in a hollow, but Baronet, who had been showing much greater working powers, at last found and pointed a single bird. Thus, knowing his dog, claimed a point too quickly, as we thought, for Baronet was unsteady at the time. A bird, however, was subsequently flushed, and the little pointer was allowed the point, Jennie having all this time been sticking closely to the heels of her handler. A move was then made for the second bevy, and Jennie was penalized with a false point, although birds were in the briars, and Baronet refused to back. Baronet found a single bird along a path in the briars, and pointed grandly and Jennie backed. Thus flushed and killed, the judge stepped on and stopped cautiously, and Baronet backed; both dogs rooded on, and Jennie got to the birds and pointed. Tallman flushed and crippled a bird. The bevy, which was a very large one, pitched into the scrub oaks along the shore, and Jennie retrieved the dead bird. Baronet then pointed handsomely, and Jennie failed to back, and thus flushed a single bird, and on moving on walked into the bevy, and, shooting twice, got one down, the little pointer dropping quickly to wing. On being sent to retrieve the dead bird, he mounted and bit it badly, but the bird was a cripple and the cover thick. All along Baronet had shown good finding qualities, and the brace was ordered up after being down three-quarters of an hour, with Baronet the winner.

Belle against Daisy.

At exactly ten o'clock the second brace, Belle, the first winner of the Nursery Stakes yesterday, handled by Haight and Mr. Godeffroy's Daisy, handled by his trainer, Philip Thurlie, who has established a reputation from training McDonald's Plumke, were cast off in the old stubble field in a most favorable place for the opening spin. The little setter bitch Daisy showed herself to be a very quick worker, exceedingly sharp in her turns, and a grand free ranger, being astonishingly fast. Belle also showed her stylish form to great advantage, and was evidently a plucky one, for one of the toes of her off hind foot was greatly enlarged from an accident on the cars on Saturday evening, and her foot was like a ball of fire and very painful. Across the fence in the briars Daisy passed to windward of a bevy, which her handler flushed, the bitch dropping instantly to wing. Belle secured a point and moment later a magnificent back, as Daisy stopped for a second where birds had been running. Belle false pointed along the east shore, and the brace was swung to the leeward of the range. Again the old field was entered, and Daisy more than before gave an exhibition of her flying qualities, as she secured the hills far and near. Along the brush which skirted the shore Belle began to work, feeling in the air with head well up for the scent. On she drew, fast but cautiously, for over a hundred yards, and at last settled on her point. Daisy, on being called up, failed to back, passing her companion, and fifteen yards further on she suddenly became aware of the presence of birds and pointed staunchly, Belle keeping her point. Thurlie killed and Belle, with assistance of handler, after pointing dead, retrieved in a slovenly manner. The birds having been marked along the shore in small lots, Belle was called up and followed, when she pointed staunchly and Belle followed suit. Five birds were moved and marked on a sand-hill. Daisy, in running down wind, flushed a bird, and then Belle flushed another. Back from the shore the latter found a wide-scattering bird and pointed it grandly. Daisy ran on and flushed it. Haight killed it as it quattered past him and Daisy failed to retrieve. Brace ordered up, with Belle the winner, after being down an hour and a quarter. Daisy had outranged her lucky competitor, but Belle showed much superior nose and lots of guile.

Jersey Queen against Chief.

At 11:30 Mr. Donner's fine little setter bitch Jersey Queen, handled by John Bunnell, of Forked River, N. J., and Chief, a large, good-looking red Irish dog, by James Miller, Sloatesburg, N. Y., were put down on the hills. Queen showed superior ranging and style and Chief at first seemed rather dull, but, warning to his work, ran much better. The brace was

taken to the extreme south end of the island, where birds were moved last evening. Jersey Queen, upon passing out of the scrub oak thicket, pointed a bevy which, when flushed, was not followed. A hundred yards further on a bevy was flushed by the judges. Jersey Queen then cut her tongue badly by a briar, but not seriously enough to prevent her running. At the extreme south end of the island Chief made an excellent point on a bevy in a bunch of hollars. Jersey Queen being ordered to back practically refused, but it was allowed her. She went in and shared point. Miller flushed and killed, and Queen moved in, not dropping. Chief retrieved very nicely after pointing dead. Proceeding to where bevy lit Chief pointed the bevy, and Queen being ordered up to back shared the point. Miller killed and Queen retrieved, but, indifferently. The brace ordered up after being down an hour and a quarter, Chief winning the heat. Queen had shown that she was under two-or control and Chief that he was a steady and level-headed dog.

An adjournment was made to the house for luncheon.

Belle against Baronet.

On resuming at 2:10, the second series was commenced with Belle and Baronet each one heat winner. Running down wind in the old grass field, Baronet flushed a bird and chased. Upon being sent into the scrub oaks on the crest of a hill, Baronet pointed a bird and Belle winding it, refused to back. Working to the wind in the bay-bush field, Belle threw up her nose and drew handsomely on for a long distance, into a briar patch, where birds were seen running but could not be moved, the cover being so very thick. The crowd of spectators, which numbered about fifty, started up another bevy, and both dogs pointed the scattered birds simultaneously and each handler killed. Baronet held his point although three guns had been discharged, and a single bird which had remained was flushed in front of him. This was certainly a grand exhibition of steadiness for so young a dog, and he was awarded a second point. Each dog retrieved. After being down a half hour the brace was taken up, Baronet winning the heat, justly according to the rules. Chief and Baronet then came together in same place. Chief found a large and Baronet failed to back. Chief had his own way and pointed, and Baronet failed to back moved on past him and located birds. Miller killed and Chief retrieved. The heat and first prize was then awarded to Chief at three o'clock after running ten minutes. Five minutes later the third series commenced with Jersey Queen and Baronet running for second place. Queen flushed a single bird and then a brace, pointed a bird in the briars and flushed again on the hill in some brush. Baronet seemed tired out and needed much urging. Further on Queen pointed in hollow by a scrub oak bush, and Baronet came in and the bird flushed between them. The judges ordered brace up, awarding Jersey Queen the second prize, and, as they were empowered to do so by the rules, gave Baronet third and Belle fourth. The judges adhered strictly to the laws of running, and in consequence the dogs were not placed according to their apparent merits. We consider that Belle was out and out the best dog in the stakes, although we like Chief's work very much indeed. He is not as stylish a dog as Belle, but one of the sure and steady sort.

Following is list of winners Monday and Tuesday:

WINNERS OF NURSERY STAKES.

D. S. Gregory's Jr., Belle (Sensation-Grace), lemon and white pointer bitch, 11 months. First prize.

W. Tallman's Jennie II. (Scranton Patch Jennie), black and white setter bitch, 8 months. Second prize.

James B. Raymond's Rover, liver and white pointer dog, 11 months. Third prize.

WINNERS OF PUPPY STAKES.

Max Wenzel's red, Irish setter dog puppy Chief (Berkeley Duck), 15 months. First prize.

J. O. Donner's white black and tan setter bitch puppy Jersey Queen (Ranger II.-Silk), 13 months. Second prize.

H. W. Livingston's lemon and white pointer dog puppy, Baronet (Rush-Rose), 1 year. Third prize.

D. S. Gregory's lemon and white pointer bitch puppy, Belle (Sensation-Grace), 11 months. Fourth prize.

The braces for the puppy stakes were drawn as follows:

W. Tallman's Jennie II. against H. W. Livingston's Baronet.

D. S. Gregory's Belle, against Godeffroy's Daisy.

J. O. Donner's Jersey Queen, against Max Wenzel's Chief.

(By Telegraph.)

LATEST FROM THE FIELD TRIALS.

NEW SUFFOLK, L. I., DEC. 1, 1880.

At the meeting last evening little was done besides closing the All-aged entries and the draw for braces. The same judges as served in the Nursery and Puppy stakes were appointed to act, and Mr. Hecksher was added to the list of Field Stewards. Mr. G. W. Bassford, of White Plains, New York, entered protest against dogs running in Club stakes entered after advertised date for closing same on November eighteenth.

All-aged stakes open to all setters and pointers, limited to fifty entries. First prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25. Forfeit, \$15. Closed with 27 nominations.

Entries.—P. H. Hyman, Memphis, Tenn., black, white and tan setter dog Gladstone (Dan Petrel), four and a half years.

P. H. Hyman, Memphis, Tenn., black and white setter bitch Peep o' Day (Gladstone Clip), twenty months.

C. Dubois Wagstaff, Babylon, L. I., lemon and white pointer dog Lord Infern (Golden's Dash, Henson's Fanny), two and a half years.

Westminster Kennel Club, N. Y., lemon and white pointer dog Sensation (Jim Nell), six and a half years.

Newton Esau, E. R., black setter bitch Smut (Pete Queen), four and a half years.

Horace S. Bloodgood, Providence, R. I., black and white setter dog Nat (Kent-Mott), three and a half years.

Dr. S. Fleet Spar, Brooklyn, N. Y., black, white and tan setter bitch Maid (the Clip), three and a half years old.

Dr. S. Fleet Spar, Brooklyn, N. Y., black and tan setter dog Fred (Bryar's Grooms-Fisher's Lee), four years.

Dr. S. Fleet Spar, Brooklyn, N. Y., black and white hick setter bitch Lizzy (the Dring-Miller), twenty months.

Dr. S. Fleet Spar, Brooklyn, N. Y., black and white setter dog St. Elizabeth, by Pride of Border-Jessie, four years.

J. C. Higgins, Delaware City, Del., black and white setter dog Dashing Monarch (Dash II.-Countess Moll), two years.

R. H. Thayer, Bristol, R. I., liver with white breast pointer dog Trim (Strong's Pete-Day's Nellie), two years.

C. S. Lincoln, Warren, Mass., orange Belton setter dog Affton (Rock Flora II.), four and a quarter years.

H. F. Aten, Brooklyn, N. Y., black, tan and white setter dog Glen (Dash Belle), six and a half years.

H. W. Ganse, Wilmington, Del., lemon and white setter dog Warwick (Leicester-Petrol), two and a half years.

Wm. Stanley, Englewood, N. J., black and tan setter bitch Belle (Jack Vintus and Lavinia), six and a half years.

J. O. Donner, New York City, white and lemon ear setter bitch Bessie (Ranger II.-Belle), two years.

ducks, which I should have at but for his extraordinary nose, pluck, perseverance, and that good sense which passes by the name of Sagacity. The dog so often showed that he knew more than his master that I ended by giving him generally his own way, and rarely presumed upon more than a deferential suggestion of his duty. How greatly his intelligence and moral character were worthy of respect the following anecdote may show.

It was a breezy day at the end of January, and my last day's shooting at the Alamitos ranch. This is a sheep range of thirty-five square miles, half marsh, half meadow, lying between mountain and sea, twenty miles from Los Angeles. I had sent my man and horses to town for supplies, and, being alone, concluded to take my boat (a Bond) and try the ducks, leaving the dog behind me. A dog is seldom desirable in a boat when the birds mostly fall on open water or mud. So I chained him up, preferring to lose a few ducks to the alternative loss of my temper. Half an hour later I was doing good work on a favorite stand at the confluence of two streams, when I noticed that the dog had slipped his collar, and was hovering at a distance, intently watching my every motion, but carefully keeping beyond shot.

Probably the remembrance of former discipline admonished him just then that discretion was his better part. Not wishing to encourage disobedience I did not call him in, but continued to retrieve my own ducks for an hour or more, when, a wounded mallard started down far off. His direction, when the dog started after it, and I forgot for the next busy half hour his very existence. Then a rustling in a bunch of reeds behind me caused me to turn, and behold! there was the dog again, sheepishly approaching with a mallard in his mouth. He stopped, hesitated a moment, and then creeping up slowly upon his belly to my feet he lay down, head between paws, blinking and begging forgiveness. There was something so penitent and beseeching in his look and manner that of course I was conquered. I accepted his peace-offering and his joyful service for the rest of the afternoon.

But the incident of that day which I intended to relate is this: I had chanced a shot with No. 4 at a white-fronted goose (*A. albifrons*) which fell dead a hundred yards off directly across the river. There had been a sudden thawing of snow in the mountains, so the water came dashing along icy, swift and strong. But the dog plunged in, and was swept by the current some hundred and fifty yards down the river. I was unable to make out the further bank, when, after one violent shake, he tore back along the oars, grabbed the goose and stood before me with it on the opposite side, happy but reflective. Evidently he felt his responsibility and the difficulty of the situation. He had a goose to convey safely to his master, but how? He looked down the river, he looked up the river, he looked across the river; then, with the decision of a philosopher, sure of the right path and not to be diverted from it, he trotted on his way, headless of my call and whistle, about 200 yards along the bank up river, slid into the water and swam, easily borne, goose and all, by the down-rushing current directly to my feet.

Can a thinking man be satisfied to explain this by the customary formula of words without knowledge—"Hereditary habit, organized into instinct?"

Perhaps such acts are common. If so, the greater reason for the doubt suggested, whether man alone possesses that rational faculty which endows itself in the power of adapting means to ends under changing circumstances, and whether some measure of our boasted reason must not be admitted to exist in many forms of the brute creation. Who can wonder, too, if—in view of such facts of developed intelligence in animals in association with man—the "untutored mind" should believe that in that "humbler heaven," which is the hunter's paradise,

"His faithful dog shall bear him company."

T. D. L.

WHAT IS A COCKER?

TORONTO, NOV. 9, 1890.

What I breed for is a small-sized, eager, active spaniel; high-couraged, so that, if outstaked, the shape of thorn-bushes or brambles will daunt him when hunted in cover, and low and strong on his legs to enable him to work out small runways. He must be well-muscled and strong in the couplings, and not too long in the back. His coat must not be too fine and silky in texture, but bright and glossy, slightly wavy and not too heavy. His head should be of medium size and good length, fair width between the ears, not so flat as the face, and the long eyes set well apart. I like to see the face, ears and legs as far as possible to stop (say three inches) with muzzle truncated or square-cut, but without any looseness of lip which should be clean cut. The teeth should be even and regular, white and sound, neither under nor over-shot. The eyes of medium size should be dark, bright and full of honesty and intelligence, an expression in them continually asking their master, "Only tell me what you want me to do and give me a chance to please you." While the color of coat most pleasing to my taste is black or dark liver it is sometimes undoubtedly an advantage to have them pied as being more easily seen in the hush. Black, black and tan, liver, liver and white, liver and tan, black and white are all legitimate colors, and it is merely a matter of individual taste as to which is preferable, and should influence a judge very little in choosing a prize-winner. While heavy feathering on ears and legs adds to a spaniel's attractive appearance it is of less value in the cocker than in the King Charles where ornament is the paramount consideration, and indeed, it is sometimes his usefulness in rendering him Abolam-like, liable to be caught in the thicket. The leather of the ear should be fine and soft, and in shape should be long and lobe-shaped, set neither too high nor too low. The feather there should be flat and silky, not inclined to run into cords or ringlets. The general appearance of the cocker is eminently symmetrical, and any clumsiness or slovenliness of action or want of energy and activity should be severely penalized in judging. The legs should be straight as well as strong, and the feet should be well clothed with hair between the toes, less spreading than those of the water spaniel and having horny soles of fair size. The body should be compact and well-balanced, and the weight should not exceed thirty pounds. A dog standing fifteen inches high at the shoulder should measure almost exactly (the nearer the better) thirty inches from tip of nose to setting on the tail. The tail should be docked to about six inches, and must be carried low and corked with great rigidity, without vigor when excited. The tail is a good index of the temperament which should be nervous, eager and energetic.

J. F. K.

I have received a letter from Mr. E. Tinsley, of Hamilton, about the *Standard*. Mr. Tinsley's dog Dash is well known as a thorough worker, and is one of the most perfect cockers I have ever seen. He is bred from stock imported from the Earl of Wilton's kennel, and Busy (1st Toronto, 1880, where Dash was 2d and should have been 1st) is a daughter of Dash. While Busy is, to my mind, a little bit too chunky, she is about the best bitch, all around, that I know of. She might be five or six pounds heavier, or, to put it more plainly, a little larger, without hurt, but I would never penalize a cocker for that fault, if it can be called such, for there are too many that run to the opposite extreme. While on the subject of size, I may as well say that "Lean" puts the division a little too low, as there are too few cocker bitches under 25 lbs. to make that the line; 30 lbs. for drs., 28 lbs. for bitches would make it a more equal division; but there is plenty of time yet to settle that point. I also hand you to-day a letter from Mr. J. F. Kirk, of Toronto. He is a better all-around judge than most, and has always a few of the very best dogs obtainable, and owns a grand old black cocker, his own, Queen, who was formerly owned by L. Willey, of Baltimore, and took several prizes when in his possession.

GEO. D. MACDOUGALL.

1,182 Chestnut St., Elizabeth, N. J.

HAMILTON, NOV. 12, 1890.

DEAR SIR: Yours of Oct. 30 to hand and contents duly noted. You request me to send you the measurements and weights of Dash and Busy, with which request I willingly comply. As you are aware, they are a dark, rich liver-and-tan color.

Busy—Height at shoulder, 14 inches; length from nose to stern, 29 inches; weight, 20 lbs.; length of head, 7 inches; ears, from tip to tip, 10 inches.

Dash—Height, 16 inches; length, 32 inches; weight, 26 lbs.; length of head, 7½ inches; ears, 18 inches.

I saw the letter in *FOREST AND STREAM* from your Kansas correspondent, who, I think, is somewhat astray on the cocker spaniel question. While it may be very convenient for the show business to have dogs that will take prizes either as cockers or King Charles spaniels, for my part, I do not want any of that kind, and I am sure enough of them at the late show in Toronto. I would respect your all round view as to the respective plates of cockers and King Charles spaniels in Stonehenge's last edition of "Dogs of the British Islands." I am at a loss to understand how any man having the least knowledge of the two breeds should confound them with each other.

By referring to *FOREST AND STREAM* of Oct. 2, 1879, you will find, over the signature of "Ranger," my opinion of what a cocker spaniel should be.

E. TINSLEY.

I must say a word to "Lean" on "What is a Cocker?" in last issue of your paper. As he states, they are floundering about without a rudder. I should say that I think he is, and most of the judges at our dog shows have also been floundering about, or badly mixed up at least, because they have not taken due pains to post themselves on modern cockers. For this breed of dogs has been an established breed for between fifteen and twenty years, and but few have taken the trouble to become well posted on them is what's the matter.

Modern cockers are from twenty to thirty pounds in weight, and toy cockers from ten pounds to twenty pounds, and of the modern cockers the twenty-pound ones are in some places better than the thirty-pound ones, but those from twenty-five to thirty pounds fit most localities better, and all except the toy cockers are almost equally good. Would it not be absurd to restrict a cocker to a certain weight when they are better to vary in size as they do at present? If "Lean" will refer to my article in September 1889 issue over signature of "Spaniel," he will get therein a few other points of the breed. Now, again, "Lean" proposes to get up an "American Cocker Club" and put in Geo. D. MacDougall as Secretary, and says "will induce my friends to join whether they are cockers or men or not, for it is not necessary for a man to own and breed cockers to procure admission to such a club as I propose." Yes, exactly; would it not be better to have men compose the club that never saw a cocker and don't know one from a mongrel bull-dog? We don't care to go into any such deteriorating enterprise, and guess you will find the other cocker men of about the same opinion. Mr. Geo. MacDougall, is a highly respected and enthusiastic young man, but his experience is very limited in relation to cockers, and he has only bred a few spaniels of any kind in the short time he has given any breed of spaniels his attention. So far as a club as this is intended to work to the advantage of certain parties, and therefore deteriorate the already well established and perfected strains that are in every way perfect as in perfect field qualities, beauty, health, disposition, color, temperament, etc., and drag them down to a standard originated by incompetent and inexperienced club. Every cocker breeder of note at all will most certainly give such an air bubble concern a very severe letting alone, and will certainly more yet prevent breeders from exhibiting them at any shows under rules to make the poorer dogs win. I should think we had seen enough of poor judging in this class of shows without handing judges a set of rules to judge by that will render the matter still worse, for with no more competent judging than has been shown in this class, what must it be if governed by rules got up by utterly incompetent parties. If bench shows will persist in foolish judging that don't know a water spaniel or a King Charles from a mongrel, and if self-bred, from modern cockers; and if folks are willing to above their cockers into such shows let them reap the advantage of such rash conduct. For my part I don't care to; and in conversing with the other breeders of repute I find they are of the same opinion, and out of the hosts of fine cockers that now grace our land, I find not one of them has ever entered a dog show, and probably never will; and in fact this may be said of many other breeds, competent judge needs scarcely any rules to guide him, but an incompetent judge needs a reasonable set of rules in the hands of incompetent judges, so as to keep them somewhere within bounds, that their friends might not be ashamed of them. I should dislike to have a fine King Charles or Blenheim spaniel of mine get first prize in the poodle class. I should feel honored, I think it was a surprise to me at last dog show in New York that the Haindri's Irish water spaniel (a fine specimen) did not get second prize in the cocker class, the way prizes went there; but Music happened to get the description for some reason that day, as he took first in cocker puppy class, and I think that "by a cocker we mean a small field spaniel." In this he is correct, although they are landsome than the field spaniels proper, and have a peculiar style of their own which every one can readily perceive. For one would heartily rejoice to see a competent rule for judging this class at shows established, and it would receive the co-operation of all cocker

breeders in the United States, I am certain; but we want no boy's play about it, nor to work for any one man's dog's interest, and then all will put a shoulder to the wheel.

"M. B." in Nov. 11 issue of above paper on "What is a Cocker?" says cockers are "mongrels, which no one can deny." I most certainly shall disagree with him, but shall not stop to argue it now, as I disagree with him on so many other points, and I at present have not the time to give them the requisite reply, but at some future time I will endeavor to do so, as I intend, at first opportunity to give you a few lines on the breeding, rearing and breaking of cockers, for the pleasure and benefit of those interested in this most valuable breed.

M. P. McKeows.

Franklin, N. Y., Nov. 22.

The article from "Lean," in your issue of Nov. 16, seems to me in most respects a very sensible one. That cockers in this country are a made breed, or mongrels, I think no breeder will deny. We see them of all shapes, colors and sizes; some on long legs, some on short; some fifteen pounds weight, others thirty to forty. Parties owning such dogs claim them, without reference to size, form or color, to be pure-bred cockers, insisting that these which differ from them are not the right sort. Stonehenge's standard does not suit many of the most prominent breeders, and in the principal works on the dog there is no satisfactory description by which one can be governed. In the different kennels with which I am acquainted there is not that uniformity which stamps them as a breed that would be recognized as being from any particular kennel, as is the case with the Llewellyn or Laverack setter. It is that point which we desire to reach. How shall it be done? "Lean's" suggestion that an American Cocker Club be formed is a good one. Let the different breeders all exhibit their best specimens at the first bench show given in any of our prominent Eastern or Western cities, that the relative merits of those shown may be compared, and of those exhibited let the club agree upon the standard dog and bitch by which future exhibitions shall be governed. If necessary to please all, make two classes, one for those dogs under twenty-eight pounds and bitches under twenty-five pounds, and one for dogs or bitches over that weight up to forty pounds, but not over. This will cover the usual weight—let the future will have to do with the rest as well as coat, etc., etc. Let a special effort be made to have the best dogs in the country, whether belonging to a breeder's kennel, or private individual's who keeps but one, exhibited.

To bring this about I would suggest that a prize of say \$50, or even more if thought desirable, be offered in addition to the regular prize offered by the association giving the show for the best dog or bitch exhibited which comes the nearest to our present standard ("Stonehenge's"). This prize to be raised by subscription among those who take an interest in the breed. I will head the subscription with \$10, and have no doubt a very good prize can be raised sufficient to induce those who claim to have the best to exhibit. There can be no more attractive feature of a Bench Show than this, and managers will find it a winning card to offer a liberal prize for this class. The prizes offered in former shows has been entirely too small to bring out valuable specimens. This breed is bound to take the top rank with those who desire a useful as well as a handsome dog. As pets, companions or hunters for many classes of game there is none superior or equally handsome. I am quite anxious to hear from principal breeders on the subject. Now that it is fairly agitated I would be glad to have some good result from it. Don't claim it is a farce for your brother breeder to call his specimens cockers because they differ from yours, and have won prizes where yours were exhibited, but strive to arrive at some definite standard which all may closely follow, and in time bring about a uniformity of breed, so that whenever one may be seen he will at once be known as a cocker spaniel up to the standard.

Chicago, Ill.

SHAMROCK.

I am well pleased with the general tone of the article in your paper of the 18th inst. by "Lean," entitled "What is a Cocker?" etc. While it is a matter of a great deal of moment to have some standard prepared by which the cocker is to be judged and bred to, I am opposed to "Lean's" method of reaching the solution of this question. I would suggest that of appointing a Secretary by the one man nomination, which will not need the co-operation of a large number of breeders, that a circular be gotten up for the use of all who feel an interest in having a standard established for judging their cockers. This circular can be sent not only to the breeder but to such persons as are known to take an active interest in the raising and breeding of this intelligent and beautiful dog, who will vote for a committee of three. The three obtaining the largest number of votes shall be declared the committee for the purposes set forth in "Lean's" article. Let the editor of the *FOREST AND STREAM* prepare these circulars and have them sent out in his paper, addressed "To those who are breeders and raisers of the cocker." On each circular will be written three names, which shall be forwarded to the said editor. The three gentlemen receiving the largest number of votes shall constitute "the committee" who will proceed to a proper organization, and draw up as soon as possible a cocker standard, and the rules and requirements governing the same. This is a fairer and better way to reach this conclusion than all of us who are lovers of the cocker desire to have settled. I am even inclined to pre-judge this matter in the least possible manner, either by mention of color, size, weight or any other condition, but will leave all to the wisdom and judgment of the committee appointed to make a standard. To defray the expense of such circulars and their distribution, and for the purposes set forth in this article, I hereby agree to donate one dollar whenever the editor of this paper shall enter upon the duty imposed upon him by the association of the cocker assist in the preparation of this standard. I would like the letter for all of us who want to see "a standard" made rather than talked about.

Ann Arbor, Nov. 21.

SENEX.

I think "Lean" is right, and second his motion that Geo. D. MacDougall accept the office of Secretary pro tem, of the American Cocker Club. That gentleman has been trying for some time to have a standard made by which to judge the American cocker, and I think he will surely accept the suggestion of "Lean" we must have two classes, for now any spaniel from eighteen to fifty pounds is called a cocker. Let those over thirty pounds go where they belong, to the water spaniel or large class. A dog above that weight is better fitted for open or field work than he is for thick cover. For my part I do not believe in a dog for woodcock or grouse, much over or under twenty-eight pounds. Over that weight

they are too large for me, and much under if they cannot stand the hard work that is sometimes required of them.

Let the work go on, my dues are ready any time they are called for.

P. S.—The distemper is epidemic here at present.

Honorable, N. Y., Nov. 4. J. O. T.

I am truly glad to see that my short note has set the dog-mania thinking, as I said, that "Leona" has just hit on the right way to solve the difficulty. Let the cocker club be formed at once, and from the members of it form a committee, who could draft a standard; also make by-laws for governing the club. The cocker spaniel is well worth the trouble, as not only very many who do not use a dog for field purposes like to have a good dog as a companion for their walks, house and office, and no dog extant is better fitted for this purpose than the cocker spaniel.

It is not too large, nor is he quarrelsome, besides being most faithful and easily taught tricks: he is a very beautiful dog, and, from the character of his hair and skin, he is in no wise an offensive dog in the parlor. The cocker has all these good qualities as a companion, and many more, too numerous to mention.

A few days ago I received a letter from a gentleman who has devoted a great deal of care and time to the subject of cockers and cocker spaniels, and as I think they are really so good, and I know they are not written at random, I would be doing an injustice to many if I kept it to myself. With your permission I will give part of his letter *verbatim*, as what he wants to impress could not be given better, nor could it be shortened. He writes thus:

"The cocker was a dog of the old time, of from fourteen to eighteen pounds in weight. His head was round, with the forehead raised, some somewhat pointed, ears of good length, but rather light, and covered with soft, wavy hair. His eyes were not prominent and were of medium size. The body of medium length, with the shape of the setter. Cocker was well feathered, with a thick, wavy coat. The colors were dark liver, liver-and-white, black-and-white and white."

"The cocker spaniel is a breed produced by crossing the old cocker with the Norfolk spaniel or the Surrey spaniel. The get of these have been inbred and interbred, producing spaniels varying in weight from eighteen to forty pounds, with various colors, as liver, liver-and-white, black, black-and-white, chestnut, chestnut-and-white, orange-and-white and lemon-and-white. The rounder the head the greater the proportion of the old cocker blood; the more prominent the eyes appear, especially when accompanied with tan markings, the greater the suspicion of the King Charles cross, and the greater the number of ticks over the face, legs and body the greater the quantity of Norfolk blood does the animal contain. The intense black specimens appear to be produced by crossing the old cocker with the Sussex spaniel and then by persistently crossing their get to have established the black cocker."

"Lemon-and-white and orange-and-white cocker spaniels are produced by inbreeding the liver-and-whites."

"For the bench I would suggest that if the old cocker still exists in his purity that he should be awarded a class in the show, and that he should have a round head, with the forehead raised, weight from fourteen to twenty-one pounds. That the cocker spaniels should be divided into three classes—large, small and dark. Large from twenty-eight to thirty-five pounds, small not to exceed twenty-eight pounds; color, liver, liver-and-white, chestnut, chestnut-and-white, orange-and-white and lemon-and-white."

"The dark division to be made up of the black, black-and-tan, and black-and-white; weight not specified."

This is what he says about cockers in general, and I think in many things he is very right, specially in his division into three classes, as there is a fear that because the black spaniel is so very fashionable at present that the other colors will be neglected and indiscriminate crossings will be made between the blacks and the livers, which will not be productive of any good to the cocker spaniel.

Trusting I have not trespassed uselessly on your valuable space, I remain, etc.

M. B.
London, Eng., Nov. 23.

Having taken a great fancy to the breed of dogs called cocker spaniels I have derived a great deal of pleasure from the articles which have appeared in the late issues of your valuable paper.

The original suggestion of Mr. Geo. D. Macdonald, to have each breeder and lover of the handsome cocker write his own paper for publication in "The Journal," is a very good one, but your correspondent "Leona" of the 18th inst., is in too great a hurry, let him wait until all have been heard. There is plenty of time to have a meeting such as he speaks of, as the Bench Shows will not take place until the latter part of next summer. I say, let us carry out Mr. Macdonald's idea, and get the opinions of each cocker spaniel breeder on this important subject. I would suggest that the originator of the idea should set the example and give to the public his views as to the proper size, weight and color of this class of dogs, then Mr. B. H. Hollis, Mr. Fellows, Mr. Kohn, Walker, Mr. McKoon and others of note should supplement it with theirs. To call a meeting now as suggested by your correspondent of the 18th would, I am afraid, turn out to be in the interest of a few in the vicinity of New York City, while if we had the views of all the noted breeders published in your widely circulated paper the public would not only be instructed on a matter about which at present they are somewhat in the dark, but the same ideas of the different breeders could be discussed at the meeting when it is held.

I do not profess to be a thorough judge, but my opinion of about what a cocker should be is something like this: Color, dark liver; weight, from twenty-eight to thirty pounds; height at shoulder, from fourteen to fifteen inches; this, of course, for a sporting dog. If wanted for a lady's pet the little fellows would be preferable. Black looks very pretty, but I can't shoot over that color. I have found by experience that I can get better with the dark liver, having tried it repeatedly against black, liver and white and black and white. Hoping that you will be able to find space for this in the FOREST AND STREAM, I remain yours truly,

Toronto, Nov. 23.

NOREN.—While at Vincennes we had the pleasure of seeing Dr. Jarvis' new importation, Noreen, one of the most beautiful dark red Irish setter bitches we have ever seen in America. She is certainly a grand bench dog, and we make room for her for some pedigree below.

Noreen was bred by James J. Giltrap, Whitehall House, Dargan Terrace, Dublin, Ireland. She is out of Mr. Giltrap's Cora by his prize dog Garryowen. Cora is little sister to Captain Amherst A. Knox's (Rappa) Cora. (Cora, C. Mayo)

Ben, winner of first prize at Dublin, 1879 and 1880. Garryowen is out of champion Belle by champion Palmerston. Capt. Knox has possessed the strain of which Ben is the representative for years, and shot over them, but never exhibiting until he exhibited Ben. Noreen was shown at Dublin, May, 1880, in a large class of twenty-five puppies, dogs and bitches, and won first prize. She was whelped June 18, 1879. Capt. Knox has kept his dogs for field work and not exhibition, but from the success of Rex, one of his strain, upon the show bench in Ireland and England he was first induced to exhibit.

A REMEDY FOR MANGE.—A number of my friends during the past spring and summer have had excellent results from a new mange remedy, the formula of which I give you for publication: One quart of coal-oil, 3 oz. carbolic acid, 2 drs. tincture cantharides, and 1 oz. of flour of sulphur, thoroughly mixed together and well rubbed into the affected parts of the skin three times a day; the diet of the dog entirely changed and green vegetables put into his mess. We all know how difficult it is to eradicate this malady from a kennel where it has once found its way among a collection of dogs. It is next to impossible to get rid of it. Season after season it will crop out, in spite of disinfectants, and canker not unfrequently follows a continued presence of this contagious canine disease.

DOG LOST.—\$25 REWARD.—During last August Mr. Chas. Heath, of Newark, N. J., lost his black pointer dog—all black excepting his fore-paws and white spot on breast. The dog strayed away from the kennels of Mr. Thos. E. Smith, Stockholm, N. J., and a reward of \$25 will be paid for his return to Mr. Smith. The dog is well known by us, and the party now keeping him will save himself trouble by returning him at once.

DRUID STAR WHIFFS.—Mr. W. B. Wells, Jr., of Chatham, Ont., writes us that his beautiful setter bitch Star, whelped on November 13 eleven puppies by Mr. Burges' famous Druid. The litter is an exceptionally fine one. Two of the bitches are nicely marked black, white and tan, and promise to equal their splendid sister Dido in point of beauty.

PITTSBURGH BENCH SHOW.—We take pleasure in announcing that Mr. Chas. Lincoln has been appointed the superintendent of the bench show which is to take place at Pittsburgh in January next. We understand that the committee anticipate making it a first-class exhibition.

GLADSTONE-LINCOLN.—One of the many disappointments of the National Field Trials meeting was that Gladstone and Lincoln did not get a chance to be down together. The Free-for-all Stakes would have been a feature long to remember had it been run throughout.

IN THE CORN.—When Count Nailer and Nimrod were down together, the following was the position during one part of the race: Mr. Drew and Mr. Short even first, judges second, reporters third, and the dogs a good fourth.

PERSONAL.—Dr. W. Jarvis and B. F. Clark attended the trials at Vincennes last week, and at their wind up left for several weeks' motor trip, announced by Mr. Jarvis.

Mr. J. M. Tracy, the famous artist, was present at Vincennes making sketches of the winners and other crack dogs. He had with him a very excellent study of Leicester.

KENNEL NOTES.

NAME CHANGES.

Blue Belle—Mr. L. E. Riblett, Galedonia, Ill., claims the name of Blue Belle for setter bitch puppy out of Mr. W. H. Mills' Belle by Mr. J. H. Whitman's Blue Dash.

Lord Elgin—Mr. F. B. Farnsworth, of Washington, D. C., claims the name of Lord Elgin for Llewellyn setter dog puppy by imported Penn out of imported, Lill.

Kate Leicester—Mr. F. B. Farnsworth claims the name of Kate Leicester for Llewellyn setter bitch puppy by Champion Leicester out of Mills' Belle.

Countess Elgin—Mr. F. B. Farnsworth claims the name of Countess Elgin for Llewellyn setter bitch puppy by Zanzibar out of Lady Elgin, Zanzibar is by Champion Gladstone out of Mersey, and Lady Elgin by Carlowitz out of Queen Des.

Larry II—Mr. H. Courtney, Milwaukee, Wis., claims the name of Larry II for red Irish puppy, whelped Oct. 1, 1880, taught by Mr. W. B. Stafford, Mankato, Minn., by Larry out of Faith.

Blue Belle II—Mr. J. S. Smith, Rockford, Ill., claims the name of Blue Belle II for Laverack bitch puppy out of Mr. W. H. Mills' Belle by Mr. J. H. Whitman's Blue Dash.

Dell II—Mr. Thos. D. Sheppard, Annapolis Junction, Md., claims the name of Dell II for red Irish setter puppy, whelped Sept. 11, 1880, purchased from Dr. J. J. J. J. out of Dell (Boh-Duck).

Kate Glen—Mr. J. R. Hendrichs changes the name of his setter dog, formerly the property of J. Palmer O'Neal, from Dash of Pittsburgh to King Dash.

Tom Clark—Mr. Thos. D. Sheppard, claims the name of Tom Clark for Irish Setter puppy, whelped Aug. 1, 1880, by Dr. D. C. Madden's Irish setter puppy out of Mr. C. R. Dittenderfer's Annie.

Grace Darling—Mr. Thos. D. Sheppard claims the name of Grace Darling for pointer puppy, whelped May 16, 1880, by Mr. C. E. Collins' Bragg (Morris' Guy II) May out of Kate Sensation-Dodge's Della.

Pegody—Capt. A. E. Woodson, of Fort Laramie, Wyoming, claims the name of Pegody for his setter bitch puppy (Rake-Pegody) recently purchased from Mr. J. C. Burchenal, of Indianapolis, Ind.

Roy—Capt. A. E. Woodson claims the name Roy for his smooth-coated black retriever out of Mr. L. C. Hunt's Roy by Mr. Jno. Goelling's Nero, both imported.

Bran, Oscar, Laura, Kilda—Capt. A. E. Woodson claims the names Bran, Oscar, Laura, Kilda for four deerhound puppies out of his Maids by Mr. N. J. Davis' imported Forum.

Dell II—Mr. Philip Lambreyer claims the name of Dell II for his liver-colored pointer puppy out of Lambreyer's Ken, sired by Culber's Duke, whelped April 2, 1880.

Maud II—See by your last issue that the name Maud II is claimed by Mr. W. B. Barlow, for a greyhound bitch, whelped from his Maud II. The Maud II owned, the mother of the whelp for which this name is claimed, is now also my dog Spring) the property of Mr. L. C. F. Lotz, of this city (Chicago).

FRED. J. ENGBERHART.

Spigot—Mr. James Page Stinson claims the name Cricket for the name Spigot for imported fox terrier bitch, purchased from Barnard. Spigot won second prize at the Boston show of 1878, and V. H. C. at the W. K. C. show in 1879 under the name of Lottery—white and tan.

Cricked—Mr. James Page Stinson claims the name Cricket for his terrier dog, one year old by Vanad out of Mettle—black, white and tan.

Sir Beys—Mr. Page Stinson claims the name Sir Beys for black and tan setter, four months old, by Redbell's Glen, he by Alex's Glen.

Daisy—Mr. James Page Stinson claims the name Daisy for liver

and white pointer bitch, two years old, by Strachan's Flash out of his Belle.

Bravo—Mr. James Page Stinson claims the name Bravo for liver and white pointer, three months old, by Hubbard's imp. Shot out of Daisy.

Kirkwood—Mr. Linc. F. Kellogg of Princeton, Kan., claims the name of Kirkwood for red Irish setter puppy by Elcho II, out of Dell.

Lady Elcho—Mr. Linc. F. Kellogg, claims the name Lady Elcho for red Irish bitch puppy by Elcho II, out of Fannie.

Gypsy—Mr. S. G. Bering, Jr., of Winterset, Iowa, claims the name Gypsy for his bitch puppy by Heck out of Bud.

Josie—Mr. T. D. Goegegan, of Louisville, Ky., claims the name Josie for an Irish setter bitch puppy, bred by Dr. Jennelle, by his Elcho II, out of his Dell (Champion Boh-Champion Truck) Belle—Mr. D. S. Gregory claims the name Belle for his lemon and white pointer bitch puppy formerly Leona by Seaton out of Grace.

WILLIAMS.

Star—Mr. Wm. B. Wells, Jr. (Chatham, Ont.) setter bitch Star, whelped November 13, 1880, eleven puppies, eight dogs and three bitches, by Druid.

Doll—Mr. John Davidson's Doll, whelped October 15, four puppies, two dogs and two bitches by Prince of Orange. None for sale.

May—Mr. Wm. H. De Forest, Jr.'s (Sumner, N. J.), pure red setter bitch May by Lincoln and Helly's Dash, whelped October 10, nine puppies, seven dogs two bitches, by Mr. C. De Rong's Montague, Salter's Dash-Lill III.

Belle—Mr. H. B. Harrison's blue Belton bitch Belle (Friede of the Duke) Kirby has recently given birth to a litter of puppies by L. H. Smith's Paris (Leicester-Dart).

Norma—Mr. James H. Goodsell's imported setter bitch Norma (5,976 Eng. K. C. S. B.), bred by Mr. Llewellyn, by Dan out of Nellie, whelped four, Mr. Charles De Rong's Montague bitches, by our Champion Leicester. One of the bitches is dead, but the remainder of the litter is very promising. The dogs are a close reproduction of Leicester in color and markings: the bitches, black, white and tan like the dam. Norma was a very celebrated field bitch in the country, having been used for several seasons by Mr. Cunningham, of London, on his extensive estate in Scotland. She never was exhibited either on the field or on the bench, but we understand that her present owner intends to put her on her merits in the coming year. Her name is certain that she is one of the best brood bitches in America to-day, being own sister to Mr. Burges' Queen Mab, and combining to a remarkable degree some of the best qualities of her sire and dam, the renowned Dan and Nellie.

WRELL—Mignon—Mr. Eugene Power, Cortlandt, N. Y., black and white cocker bitch Mignon (Daisy II, out of Finley's Dart), whelped Nov. 25, six puppies, two dogs and four bitches, by Hollis' Wildair. Two of the puppies have since died.

Herbert's Kate—Mr. Herbert's Kate is sister to Llewellyn's Champion Dash II, whelped Nov. 27, 1880, two dogs and four bitches sired by his imported pure Laverack Aldershot.

DREN.

Flora-Montague—Messrs. Wm. B. and James L. Banks, Jr.'s, Flora (Lill II-Pop), first prize New York, 1878, and first prize Boston, 1879, by Charles De Rong's Montague bitches, by our first prize Philadelphia and second prize New York.

Countess-Count Noble—Mr. Isaac Yentley, Jr. (Cortlandt, N. Y.) Countess (Leicester-Duchonantes) to Mr. D. C. Santoni's Count Noble (Count Winden-Nora).

Jock—Mr. John sether bitch Jennie (Copland's Shot-Tilly's Mab), owned by John Fitzpatrick, Waterville, Conn., was bred to G. S. Sedgewick's Jock, Jr., (First W. K. C. Show, N. Y., 1880), Nov. 17.

IMPORTATION.—We learn that Mr. A. Talbot, of Boston, has recently imported from England three beagles, one dog and two bitches and one pug bitch. All are very fine specimens: the beagles in the opinion of Mr. Talbot the best he has heard of anywhere in Boston. If a show is held in this city next year Mr. Talbot proposes to exhibit his dogs.

SALE—Dashing Lion—Mr. Isaac Yentley, Jr., has purchased from Mr. D. C. Sanborn, the white, black and tan setter dog Dashing Lion (Dash-Lill) by Lill.

Mr. Linc. F. Kellogg, of Princeton, Kan., has sold to Mr. Ed. Fuller, of Ottawa, Kan., a red Irish dog puppy by Elcho II, out of Fannie, to Mr. Knowles, of Soloth, Nemaha Co. Kan., a dog pup by Elcho II, out of Fannie, and Lady Elcho II to Mr. Wm. Smith of Ottawa, Kan.

CORRECTIONS.—In our issue of two weeks since, one or two typographical errors need correction. For Count Winden read Count Winden and for Mr. Moore, the handler of Cecil, read Mr. Morris.

KENNEL MANAGEMENT.

1. E. M. G., Lambertville, N. J.—What is the matter with my pointer puppy, fifteen months old? He has spells that I don't know anything about. Every six or eight days he has them. He looks gaunt and poor. He starts and mopes around the house, and slobbers at the mouth a thick slime. It is stringy, and he will commence drawing air through his nose, as if there is something in it that he cannot get out. He scratches his ears all the time, and likes to have them rubbed. Aus. Give your dog a rub of table salt once a day for three days—a tablespoonful is enough. Then give five grains of calomel, and ten hours after, a dose of castor oil. Feed carefully during the time, and keep warm and comfortable, with plenty of fresh air. The trouble with his ears you do not describe fully enough. Is there any running from them? If so, he has probably got canker. To treat same we refer you to answers in late numbers of FOREST AND STREAM on the subject.

2. A. D. E., Irvington, N. Y.—I will endeavor to give you some idea of the condition of my dog's eyes. I have noticed several times, particularly in the morning, that there is considerable white matter on the eyes and lids; once or twice it has partially covered the eye. Sometimes the lids are red, as if the eyes are weak. This is about all I can tell you. There is probably not much the matter with the dog, but I think something to strengthen his eyes would do good. Aus. Wash the eyes with tepid water twice a day, and give a purge twice a week. Do not feed too much meat.

3. C. B., Poughkeepsie, N. Y.—I had a beautiful red Irish setter puppy, four and a half months old. Last Thursday I gave him a large dose of sulphur—not quite a tablespoonful—in his cracker and milk. He ate it with a relish, as it seemed. Friday he was a little off. Saturday he became a little weak in his back and legs, and Sunday morning he was very weak and could not stand. I called in a dog farmer and judge and he gave him a teaspoonful of table salt about eleven o'clock. At one o'clock he was dead. Can you tell me the cause of the dog's death? Aus. There should have been a post mortem examination which would definitely have settled the cause of death, and speculation as to the cause from your description, not having seen the puppy, is rather useless. The dose of sulphur was too large, but should not have caused death.

4. C. X., Millsburg, Pa.—An incision can easily be made to enlarge the sheath by any surgeon, if he thinks it necessary, and that will cure the trouble which is called phimosis.

5. F. S. P., Portville, N. Y.—My Newfoundland dog has a large sore on his back, or rather rump. It is very much inflamed

12. J. T. W., Ionia, Mich.—1. I have a bull terrier bitch one year old. When about six months old she had the distemper and it left her in a bad state. She looks and acts well, is playful and when in action you would not know there was anything the matter with her, but when she stands she keeps dropping on her forward legs and can't stand still. She had fits for a few days, but has not had any lately. Have given her most everything. Nux vomica seemed to do her as much good as anything, but still she doesn't get well and I don't know as she ever will. If you can think of anything that will do her any good please let me know. 2. Do you think it would be a good thing to let her get with pup? 3. Do you know of any one who breeds the small white bull dogs? Ans. 1. The dog has chorea. Nux vomica one-eighth grain and quinine two grains three times a day will probably benefit her. 2. We can not advise you to breed to your bitch. 3. Write J. P. Barnard, Jr., Beacon Kennels, Boston, Mass.

WHAT THEY SAY OF US

XII.
A gentleman of this city informs us that he was hunting with a friend several weeks ago near Pensacola Creek. N. J., about four miles above its mouth, when he saw a rabbit, a lot of him. He fired and killed it. He then examined it carefully and saw no evidence of injury on the body. As they were departing from the vicinity, they found at a short distance the dead body of a hare with head pointed in the direction of the rabbit. As no injury could be found on the body of either, they concluded that after a long pursuit, both hound and rabbit died from exhaustion at about the same time. The tracks of the hound were not much longer than those of the rabbit, and were imprinted in the sand. It is not an uncommon occurrence for hounds to die from exhaustion after returning from protracted hunts, but an instance like this is very extraordinary.—*Germanian*

XIII

One morning I took a little brown and white dog, owned by one of the bosses on the Pennsylvania Railroad, was playing about the depot shortly before 9 o'clock. During his gambols he got between the tracks just as the two lightening through trains were approaching, which he passed easily. He was in no danger, for he quickly looked in either direction, and calculated that if he should attempt to cross the track on either side he would certainly be crushed to death. Now, this dog did the only thing which could have been accomplished by a human being—he stretched himself out upon all fours, placed his nose between the rails, and, with a look of intense satisfaction, thus bridged the gap. A number of gentlemen witnessed the action.

of this dog, one of whom gave the particulars to the reporter.—
New Brunswick (N. J.) Freeman.

I send you the following dog story, the truth of which is vouched for by the young lady who owned the animal: He pet dog, a black and tan terrier, was well-known to his neighbors for his intelligence. He had established a remarkable friendship for a certain kitten, although good for little but attacks on all others. This kitten was invited with fleas which, when the dog discovered, he took her by the nape of the neck, in truly parental fashion, and soured her up and down in a bucket of water. He would then take her out into the sunshine and carefully pick out the drowned fleas.

NATURE.

Go to C. L. Ritzmann, 943 Broadway, to buy your Skates.

OLD TIME PRACTICAL JOKES

A JOLLY crowd it was that used to sally forth from this city in pursuit of game, from 1857 to '61—a score of kindred spirits, whose like it would be hard to find in these days of game preserves and incivleness. The bags they frequently made would seem incredible now; so perhaps it is just as well not to tax the credulity of the present generation with a narrative of their doughty deeds with gun and dog. A few anecdotes will suffice to show that they did not depend entirely on slaughter for amusement.

Practical jokes had become so numerous, and tricks so common, that it was almost as much as a man's life was worth to be off his guard; therefore the mirrods always kept a sharp lookout and slept with one eye open; but even then they often caught each other napping. State Senator John C. Coombs, of that county, was one of the first when a party of five were hunting and fishing in the Contra Costa Hills. Coombs was deeply interested with hook and line, while the others spun yarns. Bears were the subject under discussion. Coombs finally came to the conclusion that he wasn't afraid of bears anyhow. Conversation lagging, the others picked up their guns, and started up the hill. Coombs followed them. The brush was thick and tangled; thick; but they finally reached the top, and the first object that met their gaze was a brindled calf. The thought crossed them all like inspiration to drive the calf through the brush on to Coombs below. The calf was surrounded and driven quickly down the hill. Coombs heard the noise, but could see nothing. The calf was on the point of breaking through the brush into view, when Gallagher and Gallagher cried, "Coombs, look out for the grizzly." At the same moment the animal dashed toward Coombs, and the terrified fisherman plunged headlong into ten feet of water, and dove and kept diving until the shouts of laughter on the bank reassured him that the coast was clear. Then he came out, only to find that the calf and four men rolled off the hill, and he caught Coombs looking serious at that moment, but only he laughed, and rolled top.

Not long after this event a party of the same sportsmen, including John K. Hackett, afterward the celebrated Recorder of New York, Ned and Charlie Gallagher, Johnny Orr, George Coffee and William Kohl, made in Amador Valley what they thought then, and still think, was the biggest bag of game ever made in the State in our day. Besides untold numbers of ducks, geese, quail and rabbits, Gallagher, Kohl and Coffee bagged fifteen dozen and four English snipe. Coffee killed sixty-two, Gallagher thirty-three and Kohl sixty. We were with them, and saw Kohl kill a quail, Gallagher, and Gallagher and Coffee in another, and the two others in a third. Hackett succeeded in having all the snipe placed in his buggy, and as he and Kohl had a fast horse, they soon left the others behind; and when Gallagher and Coffee reached Hayward's Hotel, and were about to register the game (each hotel kept a register for game then) what should they see, but recently written: "Kohl, Hackett and friends, so many ducks, so many geese, and fifteen dozen and four English snipe," the same thing was done at San Leandro, and when they reached the city, to make matters worse, they found that Hackett and his friend had given every single snipe away.

way. Ned Gallagher and George Coffee were not easily beaten in playing pranks, so they kept quiet and bided their time. Not many days elapsed before the same gentlemen made another trip to the same place and met with their accustomed good luck. As the day drew to a close Messrs. Gallagher and Coffee came into camp, a little in advance of the rest, as per agreement, and proceeded to develop their little plot. Knowing that the greater part of the road home was along the trail and very dark, they took the front wheels of the two buggies and put them on the uphill side and put the small, front wheels on the down grade side, and screwed them on tightly, took all the monkey wrenches out of the buggies, and started rapidly for Hayward's and spread the joke. Kohl, Hackett and friends were thus compelled to drive all the way in that strange rig, and on arriving at Hayward's were met by a laughing crowd of spectators, whose shouts and cheers so incensed the unlucky hunters that they set out to clean out the place. It was some hours before good feeling was restored, and the war between the pranksters and the survivors of the halcyon days, a number of whom still reside in this city.

PIONEER, in Pacific Life.

PIONEER, in *Pacific Life*.

BETHLEHEM, PA., Nov. 12.

I FIND the FOREST and STREAM up to its old standard, in some respects better. I am glad that you propose to omit cricket entirely, so as to give more room to the rod and gun. And I think this change a decided improvement. Keep right on, you are doing a good work in elevating the literature of sportsmen.

For another thing I cannot thank you enough, that is your rigorous exclusion of the bottle. Don't let it creep in. It causes many an accident, and it inevitably degrades the man who uses it. From you the young men may learn that a man may have a keen enjoyment of sport, may be a good shot and an artist with the fly and yet have no use for the accursed bottle. Again I say, my sincere thanks for this. C. B.

BOSTON, Mass.

One morning in each week I receive my mail with greater pleasure than usual. The particular morning referred to is the day which brings me the FOREST and STREAM. For a time I am taken away from scenes of business strife to the happy hunting grounds of the past, and in turning the leaves of this able journal I seem to scent the breezes of forest and stream from the many districts of the country, some of which are as yet unexplored by the writer, and many from localities old and familiar to your scribe.

TRAJECTORY.

The Rifle.

VERMONT—*Braintreeboro*, Aug. 18.—Thinking that perhaps it would be of interest to some of the readers of FOREST AND STREAM I send an account of the mid-range rifle match which took place between the Rod and Gun Club, of Springfield, Mass., and the Fort Dunham Club, of this place, at the range of the latter club at Vernon to-day. The scores of both teams at the 400 and 500-yard ranges were excellent and have never been excelled on our range. The highest possible of 75 was reached by members of both teams on the 400-yards range. The wind, which freshened up some at 500 yards after dinner, developed into a perfect gale, varying from 12 to 9 o'clock, requiring the use of all the way from 1 to 10 points of windage, and the score at 500 yards suffered accordingly. Members of our club were high in praise of the gentlemanly qualities of the Rod and Gun Club, and another season will probably see the inauguration of a series of friendly matches. The following is the score in full:

[illegible]

Cheyenne, Nov. 25.—The Thanksgiving Day match was declared a most enjoyable success by all who took part in it, as it certainly was a real novelty in the shooting line. It was, in fact, a novel mode of handicapping, so pleasantly were the poorer shots led to suppose that they were having a close call on the skelets. The match was an all-day one, open to everybody, at 200 yards, using the State model rifle. Every freedom was given to contestants, and the same rifle could be used by a number of shooters if the match was not thereby delayed. The entrance fee was one dollar for first entry and fifty cents for each duplicate entry—five shots each entry. Competitors to enter as many times as they please, but only the aggregate of their two best scores to count. All numerical ties to be decided by lot. Upon payment of amount of entrance fee, ammunition will be furnished without charge.

Pool targets were kept running *ad lib.*, and all day long the crack of the rifle was heard. Seventy men were out with their rifles and the entries ran up to nearly 400, one gentleman, in his eagerness for a good score, entering no less than thirty-two times. Sharp at 4 o'clock the firing ceased, and then came the settlement of the orders of ties. Before 5 o'clock the fifty leading scorers were seated at dinner in the large dining-hall of Klein's Hotel, by the range, and, with appetites sharpened by a day's shooting, the lucky fifty fell to with vigor. With the dessert Assistant-Secretary Weston, to whom the credit of suggesting the match should be given, appeared with a broad tray, on which were fifty charlotte russets. The shooting of the day had determined the distribution of these charlottes as follows:

1. The competitor making the highest score, as stated, to select four of the charlotte ruses.
2. To select three charlotte ruses, 1, 3. So select two do, 4. To select two do, 5. To select one do, 6.
- 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, one charlotte ruse each.
- 33, 34, 35, two charlotte ruses, ownership to be decided by competitors themselves.
- 36, 37, 38, two charlotte ruses, ownership to be decided by competitors themselves.
- 39, 40, 41, two charlotte ruses, ownership to be decided by competitors themselves.
- 42, 43, 44, 45, two charlotte ruses, ownership to be decided by competitors themselves.
- 46, 47, 48, 49, 50, one charlotte ruse, ownership to be decided by competitors themselves.

One double-eagle, \$20; four single eagles, \$40; six half-eagles, \$30; fourteen quarter-eagles, \$35; twenty-five gold dollars, \$25; fifty coins, \$150.

There was to be no "hefting," and the rule of draughts, that a piece once touched should be taken, was adhered to. When all had been served, on the call from the chairman, "Seared and ye shall find," all spewed down into the depths of the charlottes, and from all sides came up expressions of joy or disappointment. Van Heusen's four selections nettled him *enough*. McInnis was the lucky man, and drew the double eagle, and he was the first to get up. He took the table off its legs, and for his three pieces, and all down the table old streaks of heck ran, and the only regret of the men was that the wretched weather of the day had kept many shooters from attending on this wind-up day of the regular matches. The scores

of the match stood:	
1 A. B. Van Heusen.....	45
2 F. J. Donaldson.....	44
3 A. McInnes.....	43
4 J. L. Paulding.....	43
5 W. Mangin.....	42
6 R. Simpson.....	42
7 N. D. Ward.....	42
8 W. Robertson.....	42
9 J. H. Bolton.....	42
10 J. Underwood, Jr.....	42
11 W. R. Grohman.....	42
26 W. H. Bunlop.....	39
27 E. Dempster.....	38
28 J. Barker.....	38
29 J. C. McQuinn.....	38
30 M. Cochran.....	38
31 H. J. Farnell.....	38
32 C. F. Robbins.....	38
33 J. H. Meyers.....	37
34 W. Hamilton.....	37
35 J. Behan.....	37
36 W. J. Nordtuech.....	37

12 W. Cushing.....	41	37 H. Douglass.....	37
13 A. H. Cobb.....	41	38 H. B. Thomson.....	36
14 T. G. Williamson.....	41	39 W. C. Clark.....	36
15 E. Williams.....	41	40 F. May.....	36
16 J. R. B. Bayly.....	41	41 J. P. Salmon.....	36
17 J. W. Wright.....	41	42 J. M. Turner.....	36
18 E. Drimmer.....	40	43 J. Moore.....	36
19 Jas. Ross.....	40	44 G. B. Hartley.....	35
20 J. D. Riley.....	40	45 F. P. Miller.....	35
21 W. H. Scott.....	39	46 H. Brown.....	35
22 J. W. Hale.....	39	47 J. H. Saunders.....	35
23 A. J. Hewlett.....	39	48 C. R. Stone.....	34
24 C. Foster.....	39	49 W. M. Stodgers.....	35
25 A. Beath.....	39		

GARDNER, Mass., Nov. 26.—There was a good attendance at the Hackmatack Range yesterday. A series of meetings was inaugurated. There is to be a contest each week until a certain sum is realized. It is open to all. The prizes to be awarded aggregate \$50. The first prize is \$10. Distance, 200 yards, off-hand, using the inch-ring and Creedmoor target combined. The work of yesterday is told by the following score:

I. N. Dodge.....	50	97—186 Geo. F. Ellsworth.....	83	89—172
Chas. Shawway.....	46	61—110 G. R. Pratt.....	71	63—134
Frank Knowlton.....	73	66—142 A. Matthews.....	54	64—128
Chas. Merrill.....	57	63—125 H. C. Knowlton.....	59	59—178
Chester Hinds.....	75	76—132 Ames Combs.....	64	64—134
Geo. W. Gunn.....	66	79 S. J. Walker.....	61	67—148
H. S. Pierce.....	71	75—147 F. E. Nichols.....	84	83—167
C. O. Bent.....	59	80—169		

MAMMOTH RIFLE GALLERY.—Boston, Nov. 26.—Thanksgiving week was a busy one at the Mammoth Gallery, and the contestants in the Excelsior Rifle Match were large in point of numbers; the gallery was well filled both day and evening during the week with riflemen and their friends, many members of the several rifle clubs in this vicinity being among the number.

Mr. R. S. Gray, of the Massachusetts Rifle Association, still holds the lead with 191, closely followed by Mr. N. W. Arnold, of the same Association, with 191, and Mr. U. A. Pollard with 191 ranking in the order named. The three leading contestants are so close that it will be hard for any one to name the winner. Mr. E. F. Richardson follows closely with 190. Next in order is Mr. J. Merrill with 188, and sixth is Mr. S. Canterbury, with 186, out-ranking Mr. H. Appleton, who also has 186.

On Dec. 1 will commence a new match, called the Any Rifle Match, with six cash prizes, as follows: First prize, \$7; second prize, \$6; third prize, \$5; fourth prize, \$4; fifth prize, \$2; sixth prize, \$1. Conditions of the match are: Any twenty-two calibre rifle three pounds pull; rounds, eight; possible 40; five scores to win, or possible 200; position, off-hand.

The management, desiring some one to make a clean score, will offer an extra prize of \$15 to any one making a clean score of eight consecutive bullseyes. This the management thinks will be an incentive for the crack shots to put forth greater efforts in this direction. This new match will commence on next Wednesday. The following are the leading competitors, with their scores to date: 50 yards, rounds 8; possible 40; five scores to win, or possible 200:

R. S. Gray.....	25	38	28	58	89—191
N. W. Arnold.....	27	38	28	39	39—191
U. A. Pollard.....	27	38	28	39	39—191
E. F. Richardson.....	27	38	28	39	39—191
J. Merrill.....	27	38	28	39	39—188
S. Canterbury.....	27	38	28	39	39—186
H. Appleton.....	27	38	28	39	39—186
Chas. B. Robinson.....	26	36	27	37	37—183
Frank Hollis.....	25	36	26	37	37—181
C. Warren.....	25	36	26	37	37—181
A. L. Locke.....	25	36	26	37	37—181
A. C. Maynard.....	25	36	26	37	37—181
S. James.....	25	36	26	37	37—181
L. W. Farrar.....	25	36	26	37	37—181
D. L. Neal.....	25	36	26	37	37—181
F. J. Holton.....	25	36	26	37	37—181
F. J. Snow.....	25	36	26	37	37—181
Chas. H. Olin.....	24	35	25	36	36—174
E. B. Sawyer.....	24	35	25	36	36—174
O. T. Hart.....	24	34	24	35	35—172
B. H. Daley.....	24	34	24	35	35—172
H. Purdum.....	24	34	24	35	35—172
A. H. Long.....	23	34	24	34	34—169

Pistol Practice.—This favorite range has been lively also during the week, and the crack of this little arm has been almost incessant. Mr. J. J. Dunne was nearly successful in getting the gold prize, twice making thirty-nines, his third shot on one score was a three o'clock upper, and his sixth shot on his next score was a seven o'clock four; it was a fine effort, and showed capital holding. On Dec. 1 will commence a pistol match with three cash prizes, as follows: 1st, \$25; 2d, \$3; 3d, \$2; also an extra prize of five dollars to any one making a clean score of eight consecutive bullseyes. Conditions are: Holding the weapon at arm's length, rounds 8, possible 40, three scores to win, or possible 120; distance 50 feet; the match to continue during the month of December. The following are some of the best scores: 50 feet, rounds 8, possible 40:

J. J. Dunne.....	5	4	5	5	5	5—39
S. Ollivier.....	5	5	5	5	5	5—39
F. J. Rabboth.....	5	5	5	5	5	5—39
A. J. Andrews.....	5	5	5	5	5	5—39
H. M. Griffin.....	5	5	5	5	5	5—39
S. S. Fogg.....	5	5	5	5	5	5—39
A. B. Prescott.....	5	5	5	5	5	5—39
H. B. Hall.....	5	5	5	5	5	5—39
R. S. Gray.....	5	5	5	5	5	5—39

BROOKFIELD, Mass., Nov. 26.—Yesterday, Thanksgiving Day, several of the members of the Sportmen's Club had a practice at the range, breaking glass balls. Each had ten shots; the balls were thrown from a rotary trap, with eighteen yards rise. The record was as follows: C. H. Griffin, 10; J. P. Crosby, H. P. Gerald, George Chapin and Henry Crosby, 9 each. The two last are but 19 years old.

HUNTING RIFLES.

NEWPORT BARRACKS, Ky.

ALLOW me, as a sportsman of many years' experience, to ventilate my views on what I consider good, serviceable sporting rifles—rifles which in their way and for actual work cannot be excelled; and although I admit they still may be improved upon, at all events, for the present, they stand, in my estimation, as the best in this country, regardless of cost.

I will commence with what I consider to be the best rifle for sporting in timber, for self-defence against odds, for general utility, and, in fact, the best rifle for killing game on the run, and quick snap-shooting generally.

In 1870 I bought a cal. .44 rim-fire Winchester repeater, which

shot 25 grs. powder and 200 grs. lead. With this rifle I killed a good many deer and some elk, and in its day it was the best American repeater made; but then it had many shortcomings, especially for killing large game—the load was entirely too small to give good results, and although a most convenient gun, yet it was not "the thing."

In 1873 I bought one of same make, but of later model, which shot a heavier load—40 grs. powder and 200 grs. lead. This gun was a good one, and with it I killed many deer, antelope, elk and buffalo. Still it was not a "bone crusher," and although I always used a hollow-pointed explosive bullet, in many cases I did not bag game which a heavier ball and larger load of powder would have "called in." When first I used this gun I tried factory ammunition—viz., solid bullet and ordinary rifle powder. Afterward I used Curtis & Harvey powder, and made my own hollow-pointed balls. With these I came out very well, and consider that, for light sporting rifle—one that is not intended for game any larger than deer, and exclusively for shooting in timber, where the range seldom exceeds 100 yards, and no wind to disturb the flight of the ball—this is an excellent rifle; but for prairie work the bullet is too light, especially when cast hollow-pointed; and I have been sadly disappointed when shooting at black-deer deer across ravines, at say, 250 to 300 yards, when my bullet drift away to one side, per haps several feet, when I knew I held where I thought was right making due allowance for wind, depression of ground, etc.

Since then this same firm (Winchester) has turned out what consider the very best rifle in the world as an all-round gun—viz., a cal. .50 Winchester Express, burning 95 grs. powder and 300 grs. lead (hollow-pointed bullet). This gun is rather heavy, to be sure, but that is all that can be said against it, and it must be borne in mind that a strong shooting gun must be full weight, as a light gun would kick fearfully with 95 grs. powder, even if it does shoot a light bullet. I don't like the long magazine, but one that carries any, six cartridges, and that, making with one in the barrel seven shots, is as many as are generally required. Such a weapon in the hands of a skillful marksman is a perfect armory in itself, and will stop any animal at which it is fired, backed by an accurate aim and good judgment.

The penetration is not so great as that attained by rifles which shoot a more pointed and heavier bullet, but it will be found amply sufficient to bowl over a grizzly, buffalo, or any animal that is a native of this hemisphere, and with that one shot, if properly delivered. But what if the first shot doesn't? You still have six others—and there is the beauty of the repeater. Should you jump a band of deer, by keeping cool and giving the gun a show, you may bag three or four before they get out of range. This, of course, depends upon the ground, etc. At all events, you can always count upon doing more mischief with seven shots at your fingers' ends than you could under the most favorable circumstances expect to win only one or two shots. Then again, when hunting in the Northwestern States in the winter, it is an inexpressible luxury to be able to do all your loading at home before you start, as when it is ten or twelve degrees below zero I have always found it was more comfortable to keep on my gloves—or, rather, mittens—and no other gun (other than a repeater) can be handled successfully with these ungainly but indispensable appendages. By the way, for hunting in cold weather, a regular mitten for the left hand and with one a forefinger for the right is what is wanted. The trajectory of this cal. .50 Winchester Express is very flat, and that is one of its best points. To those wishing a somewhat lighter gun I would recommend this gun of this make which shoots 60 grs. powder and 300 grs. lead (solid ball), but for a smashing, killing bullet, give me the cal. .50. As to the gun being too complicated and liable to get out of order, that theory has been entirely forgotten out West, where they are most extensively used, and with decent care and attention they will last as long as can reasonably be expected, considering their price.

Regarding the Express system—or hollow-pointed ball and peculiar grooving—there is, I believe, no one who now doubts their superiority over a solid ball, any more than that a choke-line shot-gun will outshoot a cylinder, or but what a 10-gauge gun, if properly built, will outshoot a 12. These things happily seem at last to be settled facts, and it would be folly to argue with a man who would not accept them, as such an individual could never be convinced. For my part I am fully convinced that a 100-grain hollow-pointed bullet, driven by 40 grs. powder, will do more damage and have a more demoralizing effect than a 500-grain sharp-pointed bullet, with 100 grs. powder. This I know to be a fact on antelope and deer. For buffalo and other large animals the former is too light and has not the requisite penetration; but the 300-grain ball from the cal. .50 Express is just the thing.

I hope I have not opened a hornet's nest by advocating a certain rifle in preference to others, as I do this merely as a word of advice to beginners, and not in contradiction to ideas which may be too deeply rooted to allow of any change.

THURGOOD.

OF late much has been written upon the subject of "Hunting Rifles," and the articles have been eagerly devoured by me. The late Bayard Taylor used to say that he never found himself in the company of a person but what he could learn something, and so each of the new contributors I am introduced to through your columns tells me some little useful point, which adds to my store of knowledge on this subject.

Rifle shooting is my madness. Hunting with a rifle I prefer to all other sports, so if I may tell fellow sportsmen my opinion of hunting rifles, perhaps—even if I am thoroughly thrashed by some able scribe—some one may find a grain of wisdom which will profit them.

In hunting with a rifle we are supposed to be in pursuit of game which is too large and too shy to be bagged with the shot-gun, therefore we want a more powerful arm. The question naturally arises, "What calibre do I require and how much powder do I require to charge my rifle?" Look over the market, and you will find many excellent weapons, but a large, very large, proportion of the so-called hunting rifles in the gun-stores to-day are totally unfit to kill anything above the size of a hare. Rifle makers generally to-day seem to be manufacturing objects d'art instead of weapons of usefulness and defence.

When I go hunting I take either my shot-gun or rifle, and when I take the latter I go to kill what I cannot kill with a shot-gun, and I therefore have a weapon with which I can kill my game from 100

to 500 yards. To do this, 60 grs. powder is (theleast I should think of using, and never have shot less than 70 grs. The bullet I want to weigh at least 420 grs. The rifle to be .45 cal., and to weigh not under 9 lbs. Now, some of your readers will exclaim, "None of that for me," and will cite cases of tigers and bears being killed with .38 cal. rifles; but because such a case has been brought to their attention, it is no reason that the weapon is suitable to hunt such animals. Dr. Coates once shot a wolf dead with No. 10 shot, but I don't believe our ornithological encyclopedia would go without-lauding with such ammunition.

I have owned many rifles, and what I tell your readers is the result of a long experience and many tests. The finest and best hunting rifle I ever owned I bought in a city gun-store—a poor, despised, second-hand, Sharps "Old Reliable Business" rifle, the old model, with an outside hammer. How insignificant it looked in the background, for in front were those objects d'art—those beautiful, high-priced, hot-house-lower rifles, with Italian walnut stocks, rusty white straps attached to the slings (how white and clean those straps were!). But my eyes were upon that plain, substantial Sharps, and as an art connoisseur would seize a Rembrandt, a Titian, or a Guido, I seized that rifle, paid for it, and bore away my prize.

Now, if I may be permitted to, transfer the reader to the plains of the Great West. Time, early in the morning; very cold, a strong wind blowing; in the distance, five antelope; two hunters approaching them, one armed with a light rifle, shooting about 30 grs. powder, and bullet to correspond; the second, the writer, armed with the Sharps rifle above mentioned, charged with the Winchester government ammunition, 70 grs. powder and 420 grs. lead. We manage, by being mounted, to approach within about 250 yards, when away go the antelope like the wind. They run about 50 yards, and with that habit so fatal to them, stop for an instant to indulge their curiosity. In a second two shots are fired, the lighter bullet strikes the ground about 150 yards from the shooter. The antelope run, but before they have covered fifty yards, one is down, stone dead, bored through with the 420 grains of lead. I look around, and in the distance, upon a slight eminence, stands a noble buck. As in quick time as I could "pump" a shell into a Winchester, I had shipped one into "Old Reliable." The buck was so far away that as he faced me he looked like a tiny object, but he soon presented his side, and my rifle was at my shoulder. "Don't fire," shouted my companion. Crack went my rifle. "You're hit him! What a shot! He's all right!" I heard as I jumped into my saddle. What a distance, I thought, as I cantered up to my game. How pretty he looked, so sleek and clean. He was shot behind the shoulder—a well-placed shot, but he was not dead, and he jumped to his feet. Another shot brought him down, and I cut his throat just as the boys from camp came riding up. "We thought you wild," they exclaimed, "to shoot at such a distance. What a gun to 'hold up.'" The distance was paced, and 468 paces counted.

I have detailed this account—which is a truthful one—to illustrate what I wish to say in conclusion. I have shot many deer and antelope; of the latter I have rarely killed one under 200 yards, and from that distance up to 468 paces.

I want and have a rifle—the one mentioned—that I can shoot, I cover, bears and moose; and my bullet, with the charge of powder mentioned, will, if well placed, bring to bag the largest game. It will also shoot perfectly at long range. When antelope shooting, I sometimes use the Government shell, 85 grs. powder and a 500 gr. patched ball. This is very effective in making long shots.

I do not believe in magazine rifles. I have used them, and know their merits and demerits, and cannot but believe that, sooner or later, hunters who now favor them will believe as I do.

To sum up my statements in a concluding paragraph: I do not believe any rifle is fit for actual field service but what takes powder and lead enough to make a nearly flat trajectory up to 150 yards. Have your rear elevating eight feet, and learn to shoot at different distances by drawing a line or coarse sight. Let the front sight regulate the elevation. Get such a rifle, brother sportsman, and you will find it a fit weapon to shoot in timber or on the open prairie. Have target sights, if you like, interchangeable with the hunting sight, and you will find you have a "thing of joy forever."

THURGOOD.

Hop Bitters have more patience than Job, curing thousands of patients daily. See Proverbs.

Go to C. L. Ritzmann, 948 Broadway, if you want a good Knife.

Yachting and Canoeing.

RIGHT AS FAR AS HE GOES.

Editor Forest and Stream:
I HAVE observed that you think American builders give too much beam and too little depth to a yacht of given length; also, that you oppose the use of the centreboard and the use of much canvas in one sail. I infer from your account of the race between George and Annie and Ayreside that you are especially objecting to the cat rig, probably as the embodiment of all the above-mentioned defects. I think your condemnation of these models and rigs just, so far as applied to large yachts intended for rough work and much "outside" cruising; but when applied to our smaller sailing boats, of which the cat is the chief, I consider it entirely too sweeping. The very things which seem failures when applied to sea-going yachts are, it seems to me, those which make the cat such a favorite. Her small draft and centreboard enable her to sail in very shallow water, and when in deep water to use a large keel. As we cannot deepen our inlets and shallow lakes, and still like large boats, we can only increase the beam to add to their size, which increases of beam also prevents the necessity of much ballast—a great consideration to a small crew.

I suppose almost every one has had experience of the convenience of the single sail plan. Every summer I handle cat-boats alone, which it would be impossible for me to handle if the canvas was divided into two sails.

In your review of Kemp's "Yacht and Boat Sailing," you said, in speaking of the part relating to the ten and five-tonners and smaller craft, that we had practically need to nothing to learn from the English, our small sloops being far superior to anything of their class described in his book. As concerning smaller sail-boats, "On smooth water we are king." Now, the cat is the chief of these smaller boats, and I claim that it is in her class especially that "we are king." Dixon Kemp speaks very highly of the catboat, and recommends that we should have a catboat as a waterman's boat with three sails. I think it should also be remembered that our waters are not as rough and choppy as those surrounding

H. P.—Much information on canvas canoes scattered through

our back files. Article by Com. Chase in number for Aug. 7, 1879.
B. C.—Best plan to renew your Cape Ann suit is to give one or two coats of boiled linseed oil with a little beeswax dissolved in it, if the thread of the cloth is still worth it.

S. N. J., Philadelphia.—We know of no one having such a gun for sale. You will perhaps find it by making your wants known to gundealers, or by advertising in this paper.

J. B. L., Lockhaven.—Your duck may perhaps be a wood duck, but as you do not describe it we cannot tell with any degree of certainty. It is not, however, a goosander, that is certain. Write more full particulars.

H. A. G., Utica, N. Y.—1. What is the scientific name of the bluefish? 2. What is the scientific name of the fish caught along the coast with hook and line, generally called snappers and snapping mackerel and sometimes young bluefish? Ans. 1. *Pomatomus saltatrix*. 2. They are the young of the bluefish.

D. L. T.—All large yacht clubs publish an annual pamphlet giving names of members, yachts of the squadron, constitution, by-laws, etc., for private circulation among the members only. You may obtain a copy through the courtesy of the secretary possibly, by addressing him at the club rooms, Madison avenue and Twenty-second street, New York.

J. McN.—The waterproofing process you refer to is probably the following: Dissolve paraffine in naphtha or benzine and soak the garments thoroughly, letting them dry slowly. Another recipe is: Half pound sugar of lead and half pound powdered alum dissolved in bucket of rain water; pour off into another vessel and steep the garments. Hang up to dry without wringing.

SAIL BOAT.—We do not like to discourage any invention. The one you speak of will be hard to place on the market. It seems, as far as we know, more suitable to models than to large yachts. You can address the inventor through us. Only actual experience can demonstrate the extent to which it can be applied with success, and that experience we have not had.

V. A. N.—The dimensions 32x8x3 will make a good boat of the Sharpie style. A little more beam would make her safer. She will do very well for Mississippi and Florida waters. The chief danger is her great liability to capsize, and if green hands are to accompany you keep your eyes open in bad weather. A keel with iron on it would make her safe, but would not suit for exploring shallow and unknown waters. An iron centerboard would help you much. We counsel 9/16 beam. Mr. Clapham makes a specialty of such boats. See his card. The drawings of the Newport catboat were published before our advent and we cannot vouch for them. All three plans ought to coincide.

FLORIDA.—Twin Lakes, Orange County, Nov. 17.—"Florida," in your issue of the 11th, wants to know what are the prospects of a young man going to Florida to engage in the orange business? Ans. It depends mostly on the man and depth of pocket. 2. What part of the State is best adapted to the business for healthfulness and profit? Ans. Elevated pineland for the first, almost anywhere south of danger of frost or freeze. For quickest profit get the richest land to be had, which is hammock, which you can't

live on healthfully the year round. Pineland is not rich but is healthful, and takes much manuring. Locate near transportation. If possible get hammock for grove, with pineland near for residence. 3. How long before one can realize, etc.? Ans. It depends on whether you plant seedlings or budded trees. 4. What amount of capital? Ans. How much do you want to plant? 5. What time of year best to begin? Ans. September or October. 6. Any book treating of orange culture? Ans. Send to T. W. Moore, Fruit Cove, Fla., for his "Treatise on Orange Culture." I have been on my present place five years. Have had some experience: grove (part) coming into bearing. Shall be glad to give inquiring parties information. Have done nearly all my own work and know considerable about the difficulties of orange culture. It's not a "flowery bed of ease." "There is no excellence without great labor."

P. S.—One thing more, very emphatically: Let no man come to Florida, expecting to support himself from his pineland place in south Florida and raise a grove at the same time. If one can combine the three desiderata (healthfulness, good garden land and suitable orange land), then he can raise vegetables for Northern markets, and so keep the pot boiling or help thereto. There is a divided opinion as to the degree of latitude north of which the orange can safely be grown. S.

—Any subscriber or reader of FOREST AND STREAM in want of any kind of carpets, oil cloths, rugs, etc., etc., can be sure of fair treatment at the hands of John H. Pray, Sons & Co., Boston. Call or correspond with them, and get their prices before buying. It will pay you to try them.—[Adve.]

PUBLISHER'S DEPARTMENT.

MONTVIEW KENNEL CLUB. Special attention is called to a notice in another column, advertising for sale the splendid draft of the above-named kennel.

MANX, Canker in Ear, worst cases cured. Sample mailed for stamp. Hepworth, 296 Madison street, Brooklyn.

HOLABROO Shooting Suite. Uphergrove & McLellan, Valparaiso, Ind. See advertisement of "Guns to Hire."

Go to C. L. Ritzmann, 913 Broadway, to buy your Holiday Presents.

Hop Bitters never does harm to the smallest child, but good, always and continually.

William Humphreys, known to the old readers of the FOREST AND STREAM, has joined a Literary and Business Agency enterprise in this city. We take pleasure in recommending our old friend. See the advertisement.

The photographic copy of "Fysynghe Wyth an Angle," by Dame Juliana Berners, A. D., 1496, for sale by Mr. Bouton, is a handsome "plummet" in the old "black letter." Our readers will do well to remember that we have several copies of the delightful old book, edited by Mr. George W. Van Sien, handsomely bound

and in good plain type with the quaint spelling preserved, which we can supply at \$1.50 per copy. A few rubbed copies at \$1.25. Send your orders to this office soon.

NOT THE MAN.—*Cazenovia*, N. Y., Nov. 22.—Editor *Forest and Stream*: Very often I see the question asked about the responsibility of some one who advertises in FOREST AND STREAM. Not knowing but it refers to your humble servant, I send you a few names, any one of whom will tell you how I do biz with them: Colby & Johnson, 17 Maiden Lane; L. & A. Mathew, 16 Maiden Lane; Charles L. Obry, 63 Nassau street; T. Irwin & Sons, 39 Pine street; J. H. T. E. Burr, banker, Cazenovia.

WILL H. CRUTTENDEN.

[We do not recollect having received any inquiries respecting Mr. Cruttenden, and had we received them it would not have been necessary for us to ask him for references.]

FOREST AND STREAM.

A WEEKLY JOURNAL,

DEVOTED TO SHOOTING, THE KENNEL, THE RIFLE, ANGLING AND OTHER FIELD AND AQUATIC SPORTS, PRACTICAL NATURAL HISTORY, FISH CULTURE, THE PROTECTION OF GAME, AND THE INFLUENCE IN MEN AND WOMEN OF A HEALTHY INTEREST IN OUTDOOR RECREATION AND STUDY.

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Inside pages, nonpareil type, 25 cents per line; outside page, 40 cents. Special rates for three, six and twelve months. Reading notices on editorial pages, 50 cents per line—eight words to the line, and twelve lines to one inch. Advertisements should be sent in by the Saturday of each week previous to the issue in which they are to be inserted. We cannot receive new advertisements, nor alter standing advertisements later than Tuesday morning.

Correspondence.

Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guaranty of good faith. Anonymous letters will receive no attention. Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

Address.

All communications, of whatever nature, relating to the business or editorial departments of this paper must be directed simply

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Miscellaneous

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631, 633, 635, 637 Broadway, N. Y.

Wanted

WANTED, an 8-gauge breech-loader. Address, stating full particulars and price, J. O. S. SMITH, Baltimore, Md. Dec. 2, '90

MacIntosh Waterproof Goods.

In ordering Stock or Pants please state the Size—you can easily obtain it from your Shoemaker—of the Boot or Shoe you are accustomed to wear.

The quality of these goods is so well and widely known as to require no comment. It is not only unequalled, but also unapproached by that of any similar manufacture in the world. By a special arrangement with the Messrs. MacIntosh, we are enabled to place their goods in the hands of Sportsmen at prices which will certainly drive all inferior makes out of the market.

Stockings, full length, any sized foot, per pair	-	-	-	-	-	-	-	-	-	\$8 00
Pants, reaching nearly to the armpit,	-	-	-	-	-	-	-	-	-	14 00
Heavy flax ground sheets, weight 6 1-2 lbs., size 7 1-2x4 1-2 ft., each,	-	-	-	-	-	-	-	-	-	8 00

ABBEEY & IMBRIE, 48 Maiden Lane, New York.

For Sale.

FOR SALE, Stanchion or Punt Gun, for shooting on Potomac River and Chesapeake Bay. Weight, 115 lbs.; length of barrel, 19 in.; outside diameter of barrel at breech, 3 1/2 in.; diameter of bore, 1 1/2 in.; charge, 50 drs. powder, 3 to 1 lb. shot, 2,000 caps for samples. W. R. SCHAEFER, 61 Rim Street, Boston, Mass. Nov. 11, '90

BROOK TROUT EGGS.—A quantity of No. 1 Brook Trout Eggs for sale cheap; ready for shipment from Nov. 29 to Dec. 15. For prices, etc., address at once, BRALNARD & WILLOUGHBY, Randolph, Cattaraugus Co., N. Y. Nov. 25, '90

A Remington sporting rifle for sale at a great bargain. Length of barrels, 36 in.; calibre, .40 weight, 8 1/2 lbs.; pistol grip, beautiful stock, beach and combination sights; made to order, warranted accurate and as good as new, with full loading kit, canvas case; 60 loaded and 100 unloaded shells. Cost \$92; will sell for \$40, not having any use for it. Address T. E. P., Box 318, Lynn, Mass. Nov. 25, '90

FOR SALE CHEAP, archery bows, two good cotton butts, 4 inches in thickness, 12 by 14, nearly new. Address S. E. FRENCH, Park Avenue Hotel, N. Y. City. Dec. 1, '90

RARE CHANCE to get handsomely bound Vols. 1 to 12 inclusive of FOREST AND STREAM. Price 25 dollars. Address J., this office. Dec. 2, '90

FOR SALE, Sharp's rifle, .44-77, with about fifty shells, cap extractor, powder gauge, etc. In good condition, splendid shooter, sold for no fault. Price \$20. Address A. B., Box 571, New Haven, Conn. Dec. 2, '90

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Satisfaction guaranteed. Send stamp for price-list.

50 Gold, Silver, and Acacia Chromo Cards, no two alike. Sample Book, 25c. SEAY BROS., Northford, Ct.

The Kennel.

FOR SALE, one liver and white English setter (Irish), 2 years old, one Gordon setter (dog), 1 year old. Both trained by Elias Sindle, Greenwood Lake. Not having sufficient room would like to sell either one of them. H. HENCKES, 297 Provost st., Jersey City. Dec. 1, '90

FOR SALE CHEAP, a thoroughly broken red Irish setter; three years old and a splendid retriever from land or water. Must be sold. Address F. A. CROSBY, Moodus, Conn. Dec. 1, '90

FOR SALE, a black and white setter pup, 3 months old; out of owner's female by Mr. Edwin Allen's dog. Thoroughly house-broken. Price \$15. W. L. BROWN, Versailles, Ct. Dec. 1, '90

FOR SALE, a thoroughly broken Gordon setter, three years old; has been hunted by a market shooter; will be sold cheap. G. F. LEONARD, Moodus, Conn., Box 162. Dec. 1, '90

50 All Lithographed Chromo Cards, no two alike. 10c. Agfa, big Outfit, 10c. GLOBE CARD CO., Northford, Ct.

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LONG ISLAND R.R.—SPRING SCHEDULE.

Leave taking effect March 14th, 1893.—Leave HUNTER'S PT. (Flatbush Ave., B'klyn, 5 min. earlier) for

Babylon, 8.35 A.M., 3.35, 4.35, 5.35 P.M. Sundays, 9 A.M.

Pt & Whitestone, 7.35, 8.35, 10, 11.25 A.M., 2.35, 3.35, 4.35, 5, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M. Flushing, 6.30, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35, 4.35, 5, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M. Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M. Rockaway Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M. and 5.35 P.M.

Great Neck, 6.30, 7.35, 11.35 A.M., 4.35, 5.35, 6.35 P.M. Saturday nights, 12.15. Sundays, 9.35 A.M., 5.35 P.M. Garden City, Queens and Hempstead, 8, 10 A.M., 1.35, 3.35, 4.35, 5.35, 6.35 P.M. From Flatbush av. daily, except Sunday, and from Hunter's Point, Monday, Wednesday and Saturday, 12.15 night.

Wednesday and Sunday only from Flatbush av. 10 P.M. Sunday, 9 A.M., 1.35, 5.35 P.M.

Glen Cove, Locust Valley, Glen Head and Roslyn, 8, 10 A.M., 3.35, 4.35, 5.35 P.M. Sunday, 9 A.M., 5.35 P.M.

Greatport and Sag Harbor, 8 A.M., 3.35 P.M. Huntington and Northport, 8, 10 A.M., 4.35, 5.35 P.M. Sunday, 9 A.M., 5.35 P.M.

Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M. Port Jefferson, 10 A.M., 4.35 P.M. Sunday, 9 A.M. Patchogue, 8.35 A.M., 4.35, 5.35 P.M. Sunday, 9 A.M.

Richmond Hill, Glendale, 8.35, 11 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Monday, Wednesday, Friday and Saturday nights, 12.15. Sunday, 9 A.M., 5.35 P.M.

Creedmoor, 8, 10 A.M., 1.35 P.M., Tuesday, Wednesday and Saturday, commencing April 3d.

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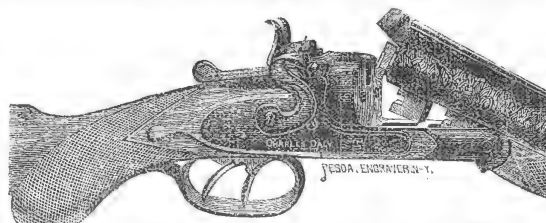
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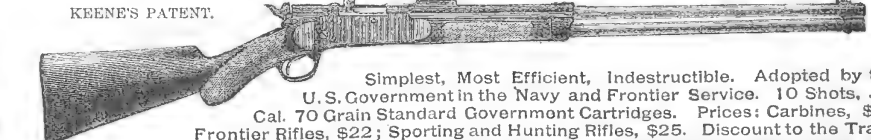
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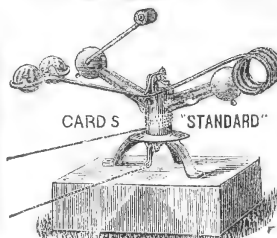
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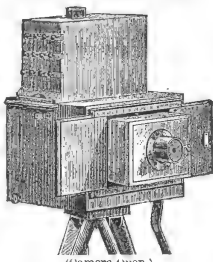
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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

Entered According to Act of Congress, in the year 1878, by the Forest and Stream Publishing Company, in the Office of the Librarian of Congress, at Washington.

Terms, \$1 a Year, 10 Cts. a Copy.
Six Mo's, \$2. Three Mo's, \$1.

NEW YORK, THURSDAY, DECEMBER 9, 1880.

Vol. 15—No. 19.
Nos. 39 and 40 Park Row, New York.

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* * THE FOREST AND STREAM goes to press Wednesdays. Correspondents are requested to mail their communications so that they may reach us before that day.

—This is an excellent time to call the attention of your friends to the merits of the FOREST AND STREAM. We shall be happy to supply specimen copies of the paper to any addresses which may be sent us for that purpose.

THE man who thinks that he can afford to pay the farmer's boy more for quail than the boy is paid by the baggage-masters is invited to send his address to this office.

WE must beg the indulgence of numerous contributors whose communications are deferred this week.

BACK FROM THE FIELD TRIALS.—A portion of the returning throng of sportsmen who had been interested witnesses at the Eastern Field Trials, passed through this city on Monday, and we had the pleasure of seeing many at this office during that and the following days. Among those who called were Col. James Gordon, (Pious Jeems), Dr. Rawlings Young (Guyon), Mr. J. C. Higgins, Mr. J. O. Donner, Mr. T. Gladston, Mr. Theo. Predmore, Mr. Tallman, Mr. E. J. Martin and Mr. G. W. Bissford.

IT is about this time of the year that the American bear vaunteth himself in all his primitive imbecility and blood-raiding ferociousness. Our country exchanges teem with hair-raising accounts of the frightful encounters and howling struggles of man and beast. There is one venerable old bear, who makes his appearance in the paper year after year, with all the regularity of the revolving planets; and along with him in this year of grace, 1880, comes the same unhappy "settler" to die again for the fortieth time his lingering death in the embrace of the monster. He is dead again; but we shall look for him, just the same, next year. He and the bear are as fixed in the newspaper world for all time to come as is *Ursus Major* in the heavens.

And, by the way, what about that family out in Iowa who are eaten up every winter by the wolves? Is it not almost time to hear from them again?

THE DITTMARS' ABRACADABRA.

THERE came into our hands some time ago a printed circular, issued by the present Dittmar Powder Manufacturing Company, setting forth as a reason for the stoppage of their "sporting powder" mill the alleged sickness of Carl Dittmar. The circular letter further alleged that the failure of the company to make any more "sporting powder" was not due to the effect of our publication of the true nature of our compound, but that, on the contrary, the publications of the FOREST AND STREAM articles had rather helped their business. Within the past week the Dittmars have published what they state to be extracts from a seventy-five page pamphlet prepared in reply to these FOREST AND STREAM statements, which had helped them so substantially. The Dittmar Powder Manufacturing Company (No. 2) is not altogether consistent.

The Dittmars preface their pamphlet by assuring the public that they did not themselves write the FOREST AND STREAM's article. The simple fact that the FOREST AND STREAM's article contained the exact truth about the "Dittmar sporting powder" is sufficient proof that it was not written by the manufacturers of that explosive.

The pamphlet which the Dittmars have been two months and a half in preparing is, as we supposed it would be, mainly an abusive attack upon the FOREST AND STREAM. Had the Dittmars been conscious that the truth was on their side they would not have tried to bury the powder beneath the gutter refuse and muck of their ribaldry. We insist, and the public insists, that the "Dittmar sporting powder" manufacturers must not attempt thus to evade the facts adduced by the FOREST AND STREAM.

Stripped of its personality, the Dittmars' "reply" is this: 1. That the truth was published by us in consequence of the withdrawal of their advertisement. We simply repeat what we said before respecting the withdrawal of that advertisement, namely, that "after their agent had been informed that we were about to publish the results of our investigation, the Dittmar Powder Manufacturing Company, upon the trumped up pretext that our refusal to publish what we thought to be a libelous letter proffered by them was unfair, judiciously withdrew their advertisement." The Dittmars allege that we published the article because they withdrew the advertisement. We affirm our belief that they withdrew the advertisement because we had told them that we were about to publish the article. This is a matter concerning which the public may draw its own conclusions. Right motive or wrong motive, the facts adduced respecting the powder remain. The Dittmars may "publicly charge" until the crack of doom; the facts are not altered thereby.

2. That the truth was published by us in the interest of other powder concerns. This is unqualifiedly false. The exposition of the powder, except such portions of it as were then credited to others, was written entirely, every paragraph, sentence and word of it, by the editor of this paper, and in the interest solely of the sporting public and for its protection.

The FOREST AND STREAM insists upon the right to expose any and every fraud and swindle, which endangers the personal safety of its patrons, and to gather its information from every available source. In investigating the "Dittmar Sporting Powder" we pursued this course, and we did not stop until we had inquired if Mr. Dittmar's sworn testimony concerning his sporting powder tallied with the letters written by him to forward its sale. We consulted the records. We found that they did not so tally. We published them. *Hinc illos lacrymæ*, which means, literally, "hence these tears," freely translated it means hence Carl Dittmar's "sickness."

3. They quibble on the patent specifications we published. By referring to the notice on the backs of the "Dittmar sporting powder" cans it will be found that the patent there called for is the one published by us. The reissue of the same patent does not affect the case at all. That those, who are interested in following the present Dittmar Powder Manufacturing Company in their crafty movements, may satisfy themselves that Mr. Dittmar's patent was correctly presented they may send to the Patent Office at Washington and procure all of his patents upon payment of a fee of twenty-five cents for each one. The numbers are 98,854, 99,069, 99,070, 145,403; reissues, 5,759 and 6,645 and No. 179,688. More-

over, if Mr. Carl Dittmar will send us a copy of a patent and accompany it with a sworn affidavit that it is the patent under which his powder is made, we will publish it, and the affidavit with it.

4. Professor Morton's report. We have not the patience to follow the writers of the pamphlet through the tortuous course of self-contradiction here, wherein in one sentence they deny that the Dittmar powder was "sporting powder," and in the next affirm it; and then go backward and forward again. For example in one sentence it is:

"The alleged Dittmar powder presented him [Prof. Morton], and which we claim to have been nothing more nor less than Duflin, a blasting powder generally called Dittmar powder."

Then:

"Suffice it to say that no nitro-sugar, etc., not even in infinitely small proportion has for many years been used in the production of Dittmar sporting powder."

And again, forgetting what they have said, further on they affirm:

"Now, as far as the nitro-starch and nitro-sugar mentioned in that deposition are concerned, they beyond cavil, are purely detonating powders, and as such highly beneficial to a blasting compound, but, although science owes the production of such nitro bodies on a commercial and practical scale to the invention of Mr. Dittmar, we have nothing to do with them here, because, as Prof. Morton states, they (i. e., nitro-sugar and nitro-starch) are present in the sporting powder in such small quantity that they do not effect the character of the material."

That is to say—and after ten weeks in which to say it—the powder referred to by Prof. Morton is in one breath "blasting powder" and in the next "sporting powder." "No nitro-sugar, etc., used, not even in infinitely small proportions," and then "they are present." The Dittmars deny that Prof. Morton referred to sporting powder and then they acknowledge it; they deny the nitro-sugar and then admit it; in short, in one of these statements the writers of this Dittmar pamphlet are guilty of falsehood.

Their pamphlet sorely needs editing. The concerted efforts of all the editors in New York could not prove the safety of the "Dittmar sporting powder," but the youngest and most inexperienced editor in the land, if he were given ten weeks in which to do it, could have doctored up this pamphlet so that its successive assertions should not have directly or by implication proved themselves false.

We advise the Dittmars to take another ten weeks and fabricate, if they can, a rejoinder, of which one-half shall not be a contradiction of the other half; a rejoinder, in short, which shall contain a decent proportion of truth.

The report of Prof. Morton referred explicitly and solely to Dittmar sporting powder, which had been received by us in person from the present Dittmar Powder Manufacturing Company, and by us delivered, sealed as received, to him.

Had the Dittmars entertained any honest doubt about this they might have written to Prof. Morton. His reply would have satisfied them.

OFFICE OF THE FOREST AND STREAM PUBLISHING COMPANY,
NEW YORK, DEC. 7, 1880.

PROF. HENRY MORTON:

Dear Sir—The FOREST AND STREAM of Sept. 23, 1880, contained a report written by you on Dittmar powder. May we ask you to state explicitly whether or not that report referred only to "Dittmar sporting powder," samples of which in sealed cans were furnished to you by ourselves. Truly yours,

FOREST AND STREAM PUBLISHING COMPANY.

STEVEN'S INSTITUTE OF TECHNOLOGY,
BOSTON, N. Y., DEC. 8, 1880.

Editor Forest and Stream:

The powder examined by me and reported upon to you as Dittmar powder was contained in a sealed can labelled "Dittmar's New Sporting Powder."

The paper seal was intact and was broken by me.

My report was therefore founded upon the material sold by the Dittmar Company as sporting powder.

On the reverse side of the can were directions about the use of the powder in shot-guns.

Truly yours,

HENRY MORTON.

If the Dittmars will furnish us a sworn affidavit that this powder, which they delivered to us in sealed cans, was blasting powder, and not sporting powder, we will with pleasure publish that affidavit also in our next issue.

As to the influence of the nitro-starch and nitro-sugar contained in the sporting powder, we advanced no opinion. We

simply stated what Carl Dittmar—under oath—said that he thought of them. And this brings us to the sworn testimony.

5. Respecting the sworn testimony of Mr. Dittmar, which we published in our issue of September 23, the Dittmar Powder Manufacturing Co. explain:

"In the first place, this deposition has no even remote application to sporting powder. It refers only to blasting powder and to the ingredients used to produce such powder."

A portion of that deposition was as follows:

UNITED STATES CIRCUIT COURT.

New York, Feb. 19th, 1880.—Before John A. Shields, United States Commissioner Southern District of New York. Deposition of Carl Dittmar, of Binghamton, N. Y., who, being first duly sworn, deposes and states:

"My gunpowder, when I first made it, had the same tendency as nitro-glycerine powder. It burst most all the guns at first, when I began to introduce it. It was just the same as if I could use nitro-glycerine powder. I have it now so that it is tamed down, and don't burst any more guns."

"My gunpowder," the Dittmar pamphleteers explain, "refers only to blasting-powder." "It burst most all the guns" "has no even remote application to sporting powder. It refers only to blasting powder." "Don't burst any more guns" "refers [Feb. 19, 1880] only to blasting powder." This "tamed down" stuff, which "refers only to blasting powder," is, or was, for sale at No. 24 Park Place. The price per can is, or was, 65 cents and 85 cents. "All canisters are sealed, and only warranted when the seal is unbroken." The manufacturers warn the purchaser that the powder is "not guaranteed if this seal is broken." He is sensible who leaves the seal unbroken.

We may explain just here that the deposition from which we have quoted Mr. Dittmar's confession, referred principally to his blasting powder. The statements therein made by him respecting his "sporting powder" were in no wise pertinent to the case, and Mr. Dittmar might just as well—and better—have omitted them. But the words, which we have quoted, he did utter under oath, little dreaming that they would ever be brought before the public in contrast with the delusive letters he had written about his "sporting powder."

The Dittmars allege that we have garbled the testimony. A copy of the deposition, as written out from the stenographer's notes and printed under the supervision of Mr. Carl Dittmar's own counsel, is now at this office. It is open for inspection. Any one who has sufficient interest in the matter may satisfy himself that we have quoted Mr. Dittmar fairly. We invite the fullest reference to every letter deposition and article cited by us in this discussion.

The Dittmars lay stress upon the fact that Bogardus and Carver used "Dittmar sporting powder." Well, Bogardus was paid to use it. Whether or not he paid now, we have no means of knowing. Moreover, we refuse to believe that Bogardus ever used it alone in a pigeon match where he was shooting for *bona fide* stakes. He has admitted to us, personally, that in such a match he would not use it in the second barrel. And as to Carver, too, used the "Dittmar sporting powder" for pecuniary considerations. Moreover, we are credibly informed that Carver shattered two guns with the "Dittmar sporting powder."

The Dittmars strenuously deny that their "sporting powder" is a nitro-glycerine powder. The FOREST AND STREAM strenuously denies it, too.

The Dittmars and the FOREST AND STREAM are agreed on that. But we have said, and we reiterate, that the so-called "Dittmar sporting powder" is analogous to nitro-glycerine powder, that is to say, that under given conditions, which are absolutely beyond the control of the man who uses the powder in his gun, the "Dittmar sporting powder" will detonate.

We insist that the Dittmar pamphleteers must not evade this statement of the true nature of the explosive. Mr. Dittmar, being first duly sworn, knows it to be correct. That is where Mr. Dittmar—under oath—and the FOREST AND STREAM agree again.

And when the Dittmar pamphleteers issue their second edition, we advise them to omit the self-contradictions and falsehoods now existing in their pamphlet, and in place thereof, to explain in their rationale of their nitro-cellulose compound that the conversion of the powder into gas may be by detonation; and for a "more extended scientific consideration" let them explain that the man who pulls the trigger of a gun loaded with their "tamed down" stuff is just as liable to blow off his own head as he is to kill the bird.

The Dittmar Powder Manufacturing Company accuse us of having been personal in our discussion of their explosive. We recognize this bid for sympathy on their part as an old dodge, but we submit that any reflections, which may have been cast upon the character of the manufacture of the "Dittmar Sporting Powder," have been only the reflections suggested by a fair presentation of his past written and sworn utterances respecting his powder. We suggest to the manufacturers of the "Dittmar sporting powder," that the sportsmen of this country are not to be caught with their chaff. A burnt child dreads the fire: the "rationale" of the process of combustion will not induce the child to put his hand into the flame a second time. The most vigorous pumping of gas will not keep a bursted balloon in the air. Scurrilous pamphlets will not float "Dittmar sporting powder."

We have repressed our indignation at the course of a man who for greed of paltry gain has placed a powder analogous to

nitro-glycerine in the hands of the sporting public, and then systematically and shamelessly bolstered it up by fraud and deception. We have directed our remarks so far as possible to the powder and not to the man. We have preferred, and we still prefer, to leave any reference to Mr. Dittmar's personal character out of this discussion. But if Mr. Dittmar and the present Dittmar company want a change, and would have us leave the discussion of the powder for a consideration of Mr. Dittmar's "honesty with respect to past and present life, and the purpose which guides him," let them distinctly say so.

We fall also to see what is the bearing on the case of the statement that the FOREST AND STREAM in the past has commended the powder. Murderers go unhung and thieves associate with honest men until they are found out. That the powder looked well at first is shown by the fact that it was accepted without question and thoughtlessly commended by many until we set to work to find out what its true nature was. Our investigation showed that its true excellence was all seeming; and the deeper we got into it the more extraordinary it seemed that the public should so long have been imposed upon. It appeared to us, after we had discovered the nature of the explosive, a plain duty to announce it to the shooting world; and having done that, we have done all that can be expected of us.

The allegation of the Dittmar Company that their business has increased and that ours has diminished since the publication of the article is one which has nothing whatever to do with the question of the safety of the powder. It makes not a particle of difference to us whether they sell ounces or tons of their compound: that is a matter which interests, we presume, only the manufacturers and the consumers of the article, and among the latter we are not to be counted. On some accounts it would be an excellent thing if their business were to prosper greatly. It would cost some lives, no doubt, but it certainly would make the gun trade very lively, and many of our advertisers would accumulate wealth at a surprising rate.

The public do not care whether the exposure of the character of the powder has benefited or injured the FOREST AND STREAM, nor did any calculation as to what would be the effect on our business enter our minds when the articles were published. We had a duty to perform; we did what we thought proper in the case.

The Dittmar Company thought that the price of their advertisement should have purchased our silence. We disagreed with them.

This paper is not managed to please the Dittmar Company, but the Forest and Stream Publishing Company and the subscribers to this journal. If its management suits them the Dittmar people may, we think, possess their souls in patience.

As a matter of fact, the circulation of FOREST AND STREAM is, and has been steadily, increasing since the publication of September 23. But that is wholly beside the question.

We have purposely avoided any discussion of alleged results of tests alleged to have been made by the Dittmar manufacturers. We do not question Mr. Carl Dittmar's ability to safely perform, with given samples of his "sporting powder," any experiments he may see fit to devise. It is a matter of record, and he swears to it, that "it [which does not refer only to blasting powder] burst most all the guns at first." But Mr. Dittmar has repeatedly told us before that he never had any accident with the powder and that he never burst any of his own guns with it. Moreover, in the absence of other proof than the Dittmar powder manufacturer's unsupported assertion, we must be excused from giving credence to what they may say.

The Dittmars again characterize our exposition of their "sporting powder" as maliciously false and slanderous. This we again deny. If they think that they can make good the charge of wrong motives and false representations, their proper course is to sue us, prove it in the courts and recover damages. They may easily satisfy themselves of our responsibility by consulting any of the mercantile agencies. And if they did not recover six cents, a simple judgment in their favor would be of more decided advantage to them and their product than they can ever hope to gain by the dissemination of twenty tons of such rotomondate as this pamphlet.

The Dittmars have proved such adepts in misrepresenting their own powder that we cannot trust them to fairly represent the charges of the FOREST AND STREAM against the explosive. We have therefore reprinted in convenient shape our scientific discussion of their nitro-cellulose detonating explosive, and we shall be happy to supply the articles upon application. They contain the simple and direct explanation of the difference between the "Dittmar sporting powder," a chemical combination, and common black powder, a mechanical mixture, and the different explosions of the two. The manufacturers wholly ignore this. There was nothing else for them to do.

MORE CAMP FOR THE EAST.—In drawing down the national carp ponds at Washington Prof. Baird found 1,000 young "leather carp" which he did not know of. These have been sent to Mr. E. G. Blackford, Fulton Market, New York, for distribution, making the third lot. These are fine fish, from four to six inches in length.

"HOMO" manages to put a deal of information into his weekly letters from Philadelphia.

WALTON'S COMPLETE ANGLER.

MESSRS. JOHN WILEY AND SONS, 15 Astor Place New York, have supplied a want in giving the angling public a new and handsome edition of the late Dr. Bethune's Walton. Of all the editions of Walton, either English or American, we have preferred Bethune's, and its popularity is attested by the fact that his editions were exhausted before his death and have been in demand since. The volume now before us is a reprint of the original, and opens with a letter from the Doctor to his friend Charles Lanman, the graceful writer and accomplished angler, and is followed by Bethune's poem, "Saptogus," which, when read in winter, stirs the angler's blood until the lines,

O, that the willow's leaf were free,

And the dogwood were in flower

rise to his brain during the cares of business, and he knows that there is a time coming when he can throw aside his cares and get beyond the screech of the locomotive. Dr. Bethune seemed to be thoroughly imbued with Walton's spirit of admiration for nature, the feeling that is at the bottom of all true angling enjoyment, and which gives more pleasure to its possessor than the mere capture of a few fish which can be bought in the market for a dollar. How many men miss this enjoyment and measure their pleasure by the number of trout in their creel. They find no music in the chirp of the kingfisher, the call of the loon, nor companionship in the chattering of the squirrel, which scolds them as an intruder into his domain; but Walton felt all this and more, and if the modern reader is occasionally tempted to smile at his credulity and superstitious notions he cannot help admiring his quaint style, which is in perfect accord with his simplicity and freedom from technical lore.

In the bibliographical preface to the first volume Dr. Bethune gives us ninety-two pages of notices of fishing books before the time of Walton, which is followed by "The Complete Angler," with copious foot notes, and illustrated with fine steel engravings of Walton, "The Salutation" and "Landing a Trout," as well as numerous woodcuts, all from the original.

The second part opens with "some account of the life and writings of Charles Cotton, Esq., by the American Editor," and steel portrait of Cotton. The list of birds is interspersed with entire poems and precedes the second part of the "Complete Angler," while the appendix contains songs and poems, and an "Arrangement according to the method of Cuvier, of the American species of fishes alluded to in the preceding pages. By James E. De Kay," which was authority thirty years ago, but is not followed now.

In the appendix is also found "Extracts from the Journal of the Lake Piseco Trout Club," and Trout Fishing on Long Island (Frank Forester); a "list of books on fish and fishing founded on Sir Henry Ellis' catalogue, as reprinted by Pickering, but very greatly enlarged and carefully corrected making the most complete list ever published," and "books in the cathedral library, Salisbury, formerly belonging to Ismak Walton.

The volume is a large one, printed in large type on good paper, and will no doubt meet with large sale. It is a large and handsome volume; price \$8 to \$15, according to style.

THE EASTERN FIELD TRIALS.

IN last week's issue we gave the full account of the running of the Nursery and Puppy Stakes, with the names of the successful youngsters. The running of the All-Aged Stakes commenced on the day of our last publication, Thursday, and continued during Friday and Saturday, ending only as the sun went down on the last day of the week. Three days therefore had been devoted to the great event, and it was deemed expedient to declare the running of the Brace Stakes off and postpone the running of the Club Stakes, indefinitely. A special train was engaged, and the party returned home late on Saturday night, well satisfied at having been present at a most successful field trial meeting.

Considering the lateness of the season the Club is to be congratulated on having secured the good services of the clerk of the weather, for only one day, Wednesday, turned out to be a bad one.

The entry of twenty-seven names in the All-Aged Stakes was a very large one, and brought together many of the finest strains of dogs in the land. The draw was remarkable, not only that the braces were to an extent evenly balanced, but it certainly was strange that the pointers should fall together as they did in the different heats.

There were plenty of birds in the openings at the start, but towards the closing hours of the trials the bevies had drawn into the dense cover and breaks, where they were hard to find, and when found in many instances impossible to move.

Taking the words in Instruction to Judges, "The dogs are to be hunted in all respects as in an ordinary day's shooting in a sportsmanlike manner," as our text, we have written our report as we saw it with our own eyes, without fear or favor. We consider that the decisions rendered by the judges were in the main correct, several of them astonishingly so, particularly in those cases where a good dog was handicapped by an inexperienced handler. But in several decisions we have begged to differ in our report, and we have tried to make it clear why we did so.

As a rule there was less "kicking" than is usually the case at competitions of the kind, and the only regular withdrawal

was one that we were told was suggested by the President of the Club.

The dogs as a rule turned up in fine condition, but there were two of the youngsters afflicted in a manner that rule No. 6 was drawn up specially to cover. No man has a right to present any dog in a manly condition, and it is a breach of contract with every owner present if the dog is allowed to run.

The largest draft from any one Kennel was that from the Monrofield, owned by Mr. W. H. Moore, of Philadelphia, in charge of Mr. Wannmaker, of Ooltspring, N. C. Lass o' Gowrie, Raleigh, Luna May, Count Fred and La Guy were all on hand, who with Countess Bang, constitute the strength of the kennel this season so far as preparation for field trial events is concerned. Mr. Moore was singularly unfortunate in having but three of the lot in running order. Countess Bang a superb small pointer bitch who was entered at Vincennes, and in fine order there, came in season on her return and had to be left at home. Both Luna May and Count Fred were taken sick two days before the opening of the trials from exposure from travelling from Vincennes. The former, a fine bitch of rare excellence and perfectly trained is one of the best field dogs in Mr. Moore's kennels, and Count Fred who was winner at Potoka last year in Puppy stakes, and also second with Lincoln in braces in same trials was a stand-by whose loss was keenly felt. Raleigh, as we have noticed in our report, was just over a severe attack of rheumatism so that out of the draft of six superior dogs only one half, and not those that were considered the best for the Robin's Island ground were left to run.

Their was a deal of luck in running off the heat, and in several instances dogs of grand ability were cut down by dogs of less merit. As shown in our report Gladstone won first; Dashing Monarch second, and the judges awarded Sensation third, and Glen came in for fourth place under the rules.

At a meeting of the Eastern Field Trials Club held at McNish's Hotel, New Suffolk, L. I., during the trials it was determined to secure the privilege of the purchase of Robin's Island from the owners. This was done, and a three months' refusal was secured.

The Sportsman Tourist.

NOTES ON DEER HUNTING IN CANADA.

THE American readers of FOREST AND STREAM, as a rule, do not appear to hunt much in Eastern Ontario, at any rate for its larger game, judging from the columns of the paper, though some are not allowed to be used or are not used to great extent in the more settled States of the neighboring Republic for the purpose of running deer. I may be pardoned, therefore, if in the following notes, I particularize more than is probably necessary, and I may add, that although running deer with dogs has a tendency to exterminate deer, or at least, to drive them to other resorts, yet while it lasts the fun is fast and furious. Who would enjoy fox hunting if the music of the dogs were wanting? though of course, the excitement of the ride lends the pleasure to the sport.

In Ontario deer hunting with hounds for the sportsman is the rule, for the pot-hunter the exception; although pot-hunters from your side of the line formerly brought dogs over here and carried off numbers of deer. Now that the Legislature has stepped in, the sportsman has a clear field. On my trip this year we were fortunate in having located ourselves where we were in no danger from dog poisoners, who flourish in some sections, and we were not even troubled, as some are, by the "natives," on hearing our dogs barking themselves to the runways and killing our deer ahead of the hounds.

My brother and myself, with a couple of men who thoroughly understood hunting, and seven dogs, put in a very good time of it for about ten days near the head waters of our Canadian Mississippi, and managed to bag fourteen deer, which is considered about the average brought in by those who were out this year.

After two days we drove over the most infernal road that statute law ever performed upon we arrived at a lumber shanty, the first, by the way, that I had ever seen. So we gazed upon that shanty and poked our noses into every corner thereof, and the result is that we now know that a lumber shanty is a log building with a large hole in the roof through which the smoke of an immense fire finds its way or not, as the case may be and the wind may decide. Around the sides are the "bunks," or beds, or whatever you like to call them, and in these shanties as many as thirty men live and sleep—if they can—for I fancy they are often troubled in their dreams with things just as annoying as the point of Shakespeare's "bare bodkin" would be, realizing to the full the expression "packed like herrings in a barrel" and living on pork, beans and bread (the latter baked in the ashes and very good) without butter during the whole winter. As I am partial to butter we moved on and reached our headquarters on the shore of the lake at dusk. At daybreak our plan generally was to send a man into the bush with two sets of dogs in order that we might have two chases in the morning, and again after lunch have two more, as some of the deer were very likely to run to other lakes than the one we were watching. As soon as the first pair of dogs "start" the man loosens the others and they start in their turn, provided they can find a track, and the man hurries back to the lake to help watch. As we could always depend on our dogs "watering" the deer somewhere, we rarely watched the runways. In the event of any of your readers not fully understanding the term "runways," I may say that the red deer have regular "runs" or paths by which, when they are chased by dogs, they make their way to the lakes where they have been accustomed to drink. Hunting on runways is probably better sport than hunting on the lakes, as you generally hear and see more of the hunt and frequently get more chances to shoot.

Last Wednesday, fifteen miles from here, I went out for a runway hunt, bringing two dogs along with me, and much to my disgust the deer took the water almost at once, although

not till he had been fired at and missed by the men with the dogs. In the afternoon of the same day we ran two more, which were both missed, much to our disgust, while I had not the luck even to see the "deers," as the hunters call them, all day. Old Charlie, my best dog, when last seen was within thirty yards of the fawn he was running, though of course he would never catch it.

To resume what I was saying about hunting on the lake. On the Monday after we arrived I had been watching for about three hours where by the well-known crash of the bushes in my rear I was put on the *quière*, and in a few seconds a nice buck jumped literally over my head into the lake. Of course a fallen tree under which I lay hid me from the deer. After looking around to see if any danger threatened, he struck boldly out into the lake. Thus the fun began as my boat into which I had by this time thrown myself was tossing wildly in a heavy sea. I pumped cartridges at the buck for some time before he got his *coup de grace*. By this time the dogs had come to the shore, and were rewarded with a taste of the blood, and as one of them was a pup it did him a great deal of good. We got another deer that day, and kept on at that rate till we left. One day we put into the lake three separate "chases," but killed none of them on account of the high wind which caused them to "skulk the shore," as it is called; that is, they strike out along the shore for a couple of hundred yards and then land, and are off for good, as they are rarely shot when they try this plan of escaping.

There is no better sport than to sit on the shore of a lake listening to the baying of the hounds, every moment expecting them to "bring in" their deer, now coming straight toward you, and then off almost out of hearing. I tell you one is kept in a delightful fever of excitement; but on windy and rainy days there is the other side of the picture, as frequently you can't hear the dogs, and you may have to remain for five or six hours wet without and dry within, without a drop of "the crature" to put a little warmth into the cockles of your heart, or anywhere else about your half frozen person, and you have got to stay there till you receive a signal to go, for it is a point of honor "never to give up the ship" when watching for deer. Ye gods! I would just say that if anyone wants to hunt deer at the proper time—the first week in November—he will find sport, but will have to have the patience of Job, with a fair share of endurance and cheerfulness under discouraging circumstances; for the very time he leaves his post, may be the time the deer will put in the deer and he had better had been the piper who played before Moses, and have been "dead and buried and embalmed before Romulus and Remus were suckled" than the man he is, for he may look out for squalls when he returns to camp if the deer has gone in at the place deserted by him.

The two men who were with us were almost as good as Indians in the woods, and as is no rare thing with an old deer hunter, could take a track, and by carefully noting the different sizes and the general direction the deer seemed to be taking, follow it till "started." This is useful, as very few dogs can take a track more than a day old, and some dogs are so keen of scent that they will work away at an old track for half a day, and in the end make nothing of it, for deer travel so far when they move about that it might be a long time before the dog could reach the fresh scent. For this reason some prefer a dog which is not too finely bred, since it is not worth while wasting time over an old trail, since while a very keen scented dog is wasting time one not bred quite so fine would pass on and take a fresher track. I am getting lazy, and what is perhaps worse, prosy, so I will just say that this paper has been written solely for the purpose of stimulating the interest of the readers of FOREST AND STREAM so that they may also give their ideas and experiences on deer hunting; for duck hunting, etc., is all very well, but any one who has hunted deer with dogs a few times will do as I have, put aside his double barrel and fishing rod and take to the rifle. We only shot one partridge, and that from the wagon with a ball during this fall's trip, and although lake trout—magnificent fellows twenty inches long—might be caught, in dozens where we were I never put in a line.

Perth, Ontario.

RIPLE.

Natural History.

OUR WATERFOWL.

Querquedula crecca. English Teal. In the male the head is slightly crested, and is bright chestnut, with a broad glossy green band on each side, becoming black and meeting on the nape of the neck behind; breast and under parts white, the former marked with circular black spots; upper parts and sides waved with black, and whitish; under tail coverts, black; speculum, green; the long scapular feathers are black externally, and creamy white internally; bill, black; feet, brownish; weight, about ten ounces. In the female the coloration is very plain, and the bird resembles somewhat the female pintail duck.

This is a European species accidental on the Atlantic coast.

Querquedula carolinensis. Greenwinged Teal. Resembles the preceding species, but has a conspicuous white crescent on the side of the body, just in front of the bend of the wing; scapulars, plain. Female resembles that of *Q. crecca*.

The greenwing is so abundant and well known throughout the country that it seems almost superfluous to speak of it at length. Almost everywhere it is highly esteemed as a table bird, and its gentle and unsuspicious nature causes it too often to fall a prey to the wiles of the small boy as well as to those of the more mature gunner.

The greenwing is a hardy bird, and usually remains with us until the advent of really cold weather. It breeds in considerable numbers in Montana, where, during the summer of 1875, we found along the mountain streams many females with newly-hatched young.

Querquedula discors. Bluewinged Teal. Male with head and neck dark slate color, almost black on the crown, with metallic reflections; a white crescent in front of the eye; under parts, yellowish brown, thickly spotted with black; upper parts, barred with black, almost to the exclusion of the brown; scapulars, striped with tawny; wing coverts,

sky blue; speculum white, green tipped; bill, black; feet, yellowish brown. Female plainer, without head markings, but may be known from any except the female of the next species by the wing markings. Size of preceding.

The bluewinged teal appears to be confined to that portion of North America east of the Rocky Mountains, being replaced to the westward of that range by the succeeding species. Throughout the country which it inhabits, however, it is a well-known bird, and, especially early in the season, affords good shooting. It shuns cold weather, and usually disappears soon after the first frost. It is a gentle little bird, and is usually very easily approached. When flying, both this and the preceding species often crowd quite close together, and a single discharge will sometimes bring to the ground a dozen individuals out of a flock.

Querquedula cyanoptera. Cinnamon Teal. Male, with head, neck and under parts, rich purplish chestnut, becoming darker on crown; chin and under tail coverts changing to black on the belly; wings as in *Q. discors*. Female difficult to distinguish from the female of that species but usually darker and with some traces of chestnut. Somewhat larger than the last, and with bill a little longer.

The cinnamon teal is a South American species which has only within a few years been ascertained to occur in any numbers in the United States. It is very abundant in California, and is found from the Pacific coast east to the Rocky Mountains. It also occurs occasionally and as a straggler in some of the Gulf States, having been reported from Louisiana by Pilat, and from Florida by Maynard. It breeds in considerable numbers in the Rocky Mountains, whence we have obtained both eggs and skins.

Spatula erythra. Shoveller, Spoonbill. Bill greatly expanded in front, being twice as wide at tip as at base and with numerous and prominent laminae. The male has the head and neck green, the breast white, sides and belly chestnut. Wing coverts, blue; speculum, green; scapulars, some blue and others black; all with white stripes; bill, black; feet, red. Female colored much like the female mallard but less to be known by the bill and the blue wing markings. Bill in female and young, yellowish brown.

The shoveller is abundant almost everywhere though perhaps less so in New England than elsewhere. It is an excellent table bird and affords good shooting in many places, being, like the little teal, rather an unsuspicious bird. It breeds in considerable numbers in the region west of the Missouri River, where during the migrations it is found in considerable numbers. It has also been found breeding in Alaska. We have found shovellers abundant in California and have had fine shooting at them in that State.

Aix sponsa. Wood Duck. Crested. Head with green and purple reflections, with parallel, curved, supercilary and post-ocular white stripes. Throat and upper fore-neck white, sending out two short stripes, one below and behind the eye, and one below the back of the head. Breast, rich, purplish chestnut; marked in front with arrow-shaped white spots. Lower parts, white; sides, gray, waved with black, and barred behind with black and white. Upper parts black, with glossy reflections. Bill, red and white; feet, brown. Female, less brightly colored, the head gray. This most beautiful of all our ducks is very generally distributed throughout North America. We have seen it in Nebraska, and it has been recorded by Dr. Hayden's expeditions from Heart River, Dakota, and other trans-Missouri localities. It is especially noteworthy, in addition to the beauty of its plumage, for its habit of nesting in hollow trees. The young either drop from the nest to the water or are carried to it by the mother in her bill.

The woodduck does not decoy well, and is perhaps most often shot by jumping it from creeks and pond holes. In many sections they are killed by paddling up to them on the narrow, winding creeks in which they feed, and shooting them as they rise from the water.

SNAKES.

SCARCELY know of an animal that crawls the earth, or cleaves the air, or swims the sea toward which I instinctively cherish a greater repugnance, and for which, at the same time, I show more consideration than the snake. Let a lot of boys encounter a snake in their rambles, and however good natured and accommodating he may show a disposition to be, by turning "tail to," he is a lucky snake if he escapes a merciless visitation of cobble stones upon his head.

The best of saints do not seem to have grace enough to permit a snake to enjoy, unmolested, the pursuit of happiness. People generally can't leave a snake alone, though to my mind it is the easiest thing in the world. If, on a bright day, a snake sees fit to crawl out of some dark cavern or nasty marsh to sun himself on the roadside, it is pronounced trespass worthy of capital punishment, and the weapon nearest to hand, be it club, fence-rail, stone, or what not, is seized for the unequal and deadly fray.

For one, I never stop to interview a snake with stones or sticks, or to molest him in anywise. If I'm in his way I get out of it. If he's in my way I allow him to enjoy it, he being the weaker animal of the two entitled to the courtesy. I always accord to him the right of way, even though I have to go across lots home sometimes. If he lifts his head and hisses forth his complaint, I say, "Yes, you're right, every man's hand is against you but one, that's mine."

Theoreticians, who love to indulge in figures of speech, talk about "the milk of human kindness." Why, for the snake, my cup is always brimful of this milk. He enjoys it; he likes to feed upon it just as much as your cats and dogs and pigs do. Now let me be understood, for I would not have anybody to think of me as strutting about on great, tall stilts, disdainfully looking down on the rest of mankind,

but the most wonderful story comes from Georgia. A gentleman in Macon sends Professor Baird the following slip from a local paper and vouches for its truth. It says: "Yesterday afternoon Mr. E. Witkowsky, who owns the tan yard on the old confederate army property, concluded to cut the dam and clean out the pond in order that he might introduce his new German carp. The pond contained a large number of smaller fish and among them Mr. Witkowsky hoped to find his four carp which had been put into the pond last May. He found three of the fish, but to his astonishment they were by actual measurement twenty, twenty-two and twenty-five inches in length respectively. The fourth escaped through the cut in the dam. These carp were but two or three inches long when put in the pond and their growth is remarkable. They are now in the tank in the rear of their owner's store on Cherry street, where we saw them last night and where the public are invited to see them to-day."

CANADIAN FISH CULTURE.—Notwithstanding the most inclement and boisterous autumn for many years past the Newcastle (Ontario) Hatching Commission has laid down upward of five million of salmon trout eggs, collected in the waters of Lakes Ontario and Huron. All of these ova were taken from fish in the act of being conveyed to the markets of the United States and Canada for consumption. The percentage of young fish hatched from these eggs will therefore be a clear gain to the country, as against a total loss.

In speaking of the increase of whitefish (*Coregonus*) since artificial propagation has been carried on, the *Essex Register* registers the following:

At one of Mr. Chas. Gauthier's river fisheries two thousand whitefish were taken last Monday. At the same place only three thousand were taken in the whole season of 1879. They are making hauls here of from twenty-five to 150 white-fish, averaging about 14 to 15 pounds apiece.

Sea and River Fishing.

CONCERNING ROBBERS.

IN a recent article on the violation of the laws and the facility with which fish and game can be disposed of in the great city, we said:

The fact is that New York City needs a game protector, and Long Island needs another—who, who reside on the premises and can watch the markets. These markets, as we have before said, are the great incentive to poachers, and if the sale of their plunder is stopped they cannot follow their unlawful business. There is entirely too lax a state of public opinion in regard to the violation of the game laws, many people looking at it as a venial offense, but it is robbery—robbery of the worst kind.

The New York Market and Index Journal publishes our article entire, and remarks:

We will allow this is an unpleasant position for our fish dealers to be placed in—"robbers" and a still less pleasant one for the markets generally—"the great incentive to poachers." The latter accusation we think entirely too sweeping, inasmuch as one would be led to believe that marketmen were hand in glove with the poachers, which we deny unhesitatingly, and yet, we shall not for one moment attempt to deny roguery or the law-breakers, and we trust that, for the good name of the markets, the marketmen shall do all in their power to assist the game and fish protective associations in their endeavors to sustain the laws, and not necessitate the appointment of a "game protector to watch the markets."

We do not mean to insinuate that the great body of market men of New York are violators of the law. As a class they contain as many honest and upright citizens as any other, but it is folly to assert that they are all saints, and among them may be found a few who have no higher idea of respect for law than—well, perhaps lawyers, doctors, editors, or other men taken in lump, and these have the same lax state of morals which we charged upon the general public, i. e., a lax idea of the morality of a violation of the game law. They know that the law says that a striped bass shall not be sold if under a half a pound in weight, but their customers will buy them and they are offered them, and so the trade is opened as if it were the most legitimate thing in the world, and we contend that the mere knowledge of the presence of an officer empowered to enforce this and kindred laws would have a salutary effect upon a class of marketmen who perhaps have not the slightest idea of being "robbers."

Nevertheless, we repeat what we said before: "These laws are made, or should be made, to give every man a fair start in the race for sport, and he who starts a few days, or weeks, in advance is a robber, whom it is base flattery to call simply a violator of the law." The striped bass question is one which affects the food supply as well as angling, and, therefore, demands enforcement.

We think that the *Market and Index Journal* will find that the interests of the market men are on the side of the observance of all laws intended to protect fish and game, and that these laws are for the good of not only anglers and sportsmen, but for the whole people.

THE CATFISH.—*Cleveland, O., Dec. 3.*—I am glad to know that the catfish is found farther north than Lake Erie, on Lake St. Clair. The farther north you find the fish the better food it will be for the table and probably the more expert in taking the fly. Perhaps you may yet find it within the Arctic circle, in which case he will probably be half salmon and the other half eel. Let some brother angler from the Red River or Lake Winnipeg region respond.

DR. E. STERLING.

We would like the address of Mr. John J. Collett, one of the recently appointed game protectors of the State of New York. We have written him at Cobleskill, Schoharie County, the address given in the original list, and the postmaster at that place forwarded it to Albany, from which place it was returned to us.

THE ILLEGAL FISHERMEN.

NOW when the law breakers have assumed an attitude of defiance to the laws and are parading the shores armed and threatening death to all officers of the law it may be of profit to read the following learned, and yet humorous opinion of Judge Riegel, and the comments of the *Syracuse, N. Y., Sunday Times*, which under the heading of "A Just Law Decried," says:

"The moment a law is enacted, the provisions of which are for the general good of the people, and yet encroach somewhat upon the privileges of a small class, it is almost always the case that such laws, though the benefit it may be, is defied by the class who imagine themselves injured by it. This has been the case, to a great degree, in this State, with reference to the just laws for the preservation of fish and game; and within the past few weeks the opposition to the officers of the law by the piratical fishermen has arisen to attempted assassination, arming of the law-breakers and threatened murder to any officer who seeks to do his clear duty."

All good citizens will rejoice at every triumph of justice in this matter, and, therefore, will read with pleasure the following Opinion of Judge Riegel, given the past week in the case of William Fancher, of Baldwinsville, against Ithuber Wood and George Travis, Fancher having sued for the recovery of the value of a net destroyed by the game constable. Fancher had recovered judgment before James R. Shea, of Baldwinsville; but Judge Riegel, as will be seen, differs with him:

It appears by the Justice's return that the defendants took what is called a fyke net from where it had been set by the plaintiff, in the Seneca River, for the purpose of catching fish, and substantially destroyed it. That when the net was taken from the river, it had in it bullheads, pike, pickerel, sunfish, perch and rock bass. The plaintiff testified that he had at that time six or seven nets in the Seneca River. He was allowed to testify, against the defendant's objection, that when he caught any fish aside from bullheads, suckers, catfish and eels, he threw them back into the river without injuring them.

On this testimony the Justice gave the plaintiff a judgment for \$25.00, the value of the net, from which this appeal is brought.

By sec. 23, chap. 534, laws of 1879, it is enacted that "No person shall kill or catch, or attempt to kill or catch, any fish except minnows, bullheads, eels, suckers and catfish, in any of the fresh waters and canals of this State by any device except that of angling with a hook and line." Certain waters are specifically excepted, not material to this case. By the same section it is further enacted that "All nets, seines, weirs, traps or other devices forbidden by this section are hereby declared contraband, and any person finding the same in any place where they are forbidden is hereby authorized to destroy such contraband articles; and no action for damage shall lie against him for such destruction."

It appears that the right of the defendants to take and destroy the net in question, depends upon the question whether they found it in a place where it was forbidden. The statute mentions no place where the devices of catching fish therein mentioned are forbidden except infrequently; but the plain inference is, that when one of these devices therein mentioned is found in a place where it is manifestly set for the purpose of catching fish other than bullheads, suckers, eels and catfish, it is in a forbidden place. It is in a forbidden place for the reason that it is in a place where it will, in the ordinary course of things, do the mischief which the statute forbids.

The law will presume that the person setting the net or other device, intended the natural consequences of his act. The defendants could not know what disposition the plaintiff would make of the fish when caught, nor was the statute so unreasonable as to require them to know. All that the statute required was that they should find the net under such circumstances, and so placed and set that it would necessarily and according to the ordinary course of things, do what the statute had forbidden.

It is possible that Mr. Fancher did throw those fish back into the river, which the law forbade him to catch. But this law was framed with no reference to the idea of such a thing, and the characteristics of ordinary mortals who would do such a thing, and whom the Legislature knew better than to trust to do any such thing. Angels' visits on this planet are too few and far between to influence the ordinary course of legislation.

A fisherman all alone in the darkness of the night or at the early dawn, in the act of sorting out the nice, pump pike, pickerel and bass, and throwing them back into the river, for no other purpose than to afford some enthusiastic disciple of Sir Isaac Walton the sport of catching those same fish with hook and line, would be a spectacle worthy the admiration of gods and men; but whether any such transaction ever occurred on this subinary sphere, aside from the one testified to by the plaintiff, may well be considered a matter for grave doubt. If the Legislature had known Mr. Fancher, it is barely possible it would have trusted him to do what he swears he did do; but such cases are too exceptional to form the basis of legislation. I never knew but one man whom I would have trusted to do such a thing. All the old women in the neighborhood declared they knew he wasn't long for the world; he was too good. It is against all probability that our legislators intended to expose the fish they assumed to protect to such dire peril, or the fishermen to such grievous temptation. Certain it is, that if the construction contended for were to prevail, the object of the act would be wholly frustrated.

It is claimed that the Board of Supervisors have passed an act authorizing the taking of bullheads, suckers, catfish and eels, by means of fyke nets, during the months of April and May. But it is plain that the Board of Supervisors cannot modify the force and effect of an Act of the Legislature.

It was not claimed before me that that part of the Act authorizing the seizure and destruction of the net was unconstitutional, and I have not, therefore, examined that question.

Decree reversed.

P. B. McLENNAN, for appellant; George Hall, for respondent.

The *New York Times*, in commenting on this, says:

The Judge's opinion is full of good, common sense, and is at the same time quite amusing. As all nets, seines, weirs, traps, or other devices, forbidden by section 23, are declared contraband, any person finding the same in any place where they are forbidden, is authorized to destroy such contraband articles, and no action of damage shall lie against him for such destruction. Necessarily, then, the nets being in for-

bidden places the constables had the right to destroy them. As to Fancher's throwing away certain fish and keeping others, his Honor treated that part of the story exactly as it deserved. The law was not made with reference to the differences of moral character in those given to setting fykes. A might be a moral poacher, and B an immoral poacher and the distinction would be hard to understand. It would take a very old and very old fyke net, however, should be taken fish at night, to determine what were suckers or young shad or black bass.

THE BEAVERKILL CLUB FOR 1880.

NEW YORK, NOV. 25.

Editor Forest and Stream:

The report for the Beaverkill Club for the past season shows that the spring and summer, indeed all the seasons have been very dry. Whether the effect of this will be to lessen the number of trout, next year's sport alone can determine; on the whole, I do not expect to find it diminished. Our warden reported late in October that he thinks there were more fish on the spawning-beds than ever before, although this seemed hardly possible.

Six of our ten members have been up on the stream this year.

There have been caught, so far as known:

1,691 trout on Mead's (Bulkley's), weighing.....	216½ lbs.
139 " Ives's (Merwin's), "	17½ "
488 " Weaver's, "	66½ "
396 " Bank's, "	49½ "
1,364 " Balsam Lake, "	205½ "

4,078 trout in all, weighing.....555½ "

Balsam Lake has been our standby; five of our members caught there, in a total of eleven days' fishing, 923 trout, which weighed 83 pounds. Every one of those fish will surely make a cup of coffee and broil some trout at a camp-fire on that lake again next year. The stream almost dried up in the matter of size, the fish seem to run larger upon Bulkley's (Mead's). Bulkley has noted thirty fish taken which measured from nine to twelve inches each in length and weighed from five to ten ounces apiece, the thirty weighing in all 17½ lbs. Besides this, Mr. Geo. W. King, while fishing on Balsam Lake with me, caught a trout which weighed eight ounces and is the largest that I ever saw taken from that lake, which has always been noted for the uniform size of its fish. On August 31 Mr. J. S. Van Cleet caught one there which weighed three-quarters of a pound. On the 14th day of August I caught 1½ lbs. in Balsam Lake, and again on August 20 I caught there and kept twenty-five trout which weighed five pounds and put back alive 44 of large average size, which weighed about eight pounds more. Mr. King took on the same day 10½ lbs., and on August 30 Mr. Van Cleet took 1½ lbs. from the lake. All who went there had good success. The expenses this year have been \$40 per member.

The average temperature by our warden's thermometer has been rather higher, but on the 1st of May it snowed and again on May 14 it froze ice half an inch thick, with frost on the 4th and 18th of June. Between the 19th of June and the 17th of July there were ten thunder showers. On June 28 Bulkley has put a X against the thunder shower, and July 10 he says it was "heavy." There was frost again the 29th of July and the 6th of August, and on the 15th of August "everything was killed by the frost." It happened to be the same time. I never realized more the injury that is often suddenly effected by natural agencies. The crops, the winter's food, the support of many families, were ruined in a night by a magic touch. The thermometer reached ninety again Sept. 16. The first snow came on the 20th of October, and by Nov. 22 the Balsam Lake was frozen "soled so it would bare up a man;" the trout had all left the inlet and were off the beds along the stream. GEO. W. VAN CLEET.

THE DEATH-TRAP IN SHINNECOCK BAY.

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POND QUOQUE, NOV. 20, 1890.

Editor Forest and Stream:

It was with much surprise that I perused your article under the above heading in your issue of Nov. 11. I was the more interested as I was intending to visit this famed locality and spend a few days on the waters and along the shore of this beautiful sheet of water. I arrived here about a week ago, and so much was I impressed with the truly lamentable state of affairs, that instead of devoting my time to the ducks, I have spent most of my vacation in trying to find a way for this disastrous evil—doubtless disastrous in many ways. You well say that the State should have sole charge of so important an interest as the food supply obtained from the tidal waters along the coast, for in this case, not only is the vast amount of fish food usually secured in these prolific waters entirely cut off, but the inhabitants of this vicinity are obliged to draw from their hard-earned store and send to New York for what fish they consume. This seems incredible, but you have only to appeal to the express company to substantiate its truth. This sad state of affairs throws two or three hundred hardy "toilers of the sea" out of employment, and of course their families must, in many instances, suffer for the necessities of life. Not only is the fishing interest annihilated, but should the bay continue closed the ducks will most assuredly leave and thus destroy the last remaining chance that the poor man, living here, has to escape a scanty livelihood. While all agree that an inlet is of vital importance I find that there is great diversity of opinion as to where it should be located, and upon sitting the evidence obtained by interviewing many individuals, from Indian Reservation to Atlanticville, I have come to the conclusion that the greatest good to the greatest number requires that the inlet should be opened as far west as possible, and I am thoroughly convinced that the old inlet, just east of Atlanticville, will entirely meet this requirement.

Without going into elaborate argument to prove this I cannot forbear to give the well-known fact that all along our extensive coast there are but very few exceptions to the rule that our land-locked bays communicate with the sea at their western extremities. While I find that nearly all wish the inlet at their doors, I have almost invariably succeeded in obtaining from them at least a partial admission that upon the whole a western inlet would serve the best purpose and last the longest. It strikes me that the State authorities should take of this matter and give this strict community such legislation as may be deemed best to protect their rights, and if I may be allowed a word, I would respectfully suggest that the committee having charge of the matter do not allow their judgment to be warped by the smoothly-flow-

ing sentences and well-rounded periods of some "oily-tongued" advocate, but rather let them listen to the hardy sportsman, who may not be able to quote you Chesterfield, but who can and will tell the truth if properly approached.

There is one great and crying evil connected with the inlet just closed that should be abolished by the Legislature or Commissioners, if they have the power, and that is the use of seines or "bull nets" at its mouth. I presume, although I do not know this for a fact, that the men who use these nets are "simple-hearted and free from guile," and are honestly plying their calling with the sole object in view of keeping the wolf from the door. Certain it is that they catch a fair amount of fish that, owing to the scarcity, bring an exorbitant price. Now let me tell you how their proceedings strike a disinterested looker on. The fishermen tell me that while the tide is running out of the bay the fish are hovering about the mouth of the inlet and just before slack water they ascend up the slight current. Now is the golden opportunity. Our honest fishermen spread their nets at the lower end while a party at the upper end, with much pounding on their boats and splashing in the water, turn the frightened fish and secure a portion of them into the nets while the rest go out to sea, and as a natural consequence the fishermen of the bay secure none, and are obliged to purchase their supply of these honest fishermen at an exorbitant price or send to New York for what they use.

Far be it from me to sit in judgment upon these men. I do not even impugn their motives. I merely state the naked facts, and but echo the wailing prayers of hungry fellow creatures when I earnestly call upon "the powers that be" to so restrict and regulate this abuse that in the dwellings around this fair bay not in vain shall be the prayer, "Give us this day our daily bread."

SHADOW.

New York, Nov. 28.

Editor Forest and Stream:

Many trips to Shinnecock Bay have interested me in that once famous shooting ground, and I beg leave to offer a word in regard to its inlet, concerning which there is some misunderstanding.

There was a State law passed about three years ago providing for the appointment of commissioners to fix the place for an inlet into that bay and making it an offense for any one to cut through the beach at any other point than the one decided on. Such a law was necessary, because it was thought that an inlet must be in the west end of the bay, in order to remain open, and because, whenever an attempt was made to cut an inlet elsewhere, the east end people would cut through the beach in their neighborhood (which they could do in a few hours, because of its narrowness), and thus obtain the head of water in the bay without which no large inlet can be secured. It is a work of many days to cut through the high beach further west.

Since this law was passed two inlets have been made, one opposite the light-house and one further west. Neither of them kept open a year, nor do I believe that any inlet from the ocean which local enterprise on Shinnecock Bay is capable of making will keep open.

Two things are to be proposed in this connection. One is that the State perform the work on a larger scale than has yet been attempted. The State appropriates a larger sum of money, which Long Island tax-payers have to help pay every year for Hudson River improvements. Why should it not spend a little on Shinnecock Bay? Another proposition is that instead of cutting through the beach to the ocean a channel be dug across the neck of land from Shinnecock Bay from Moriches Bay. I do not believe that any ocean inlet can remain open very long, while a good channel leading to Moriches Bay (the eastern part of Great South Bay) would be certainly permanent. Such a channel would not make Shinnecock Bay so good a fishing ground as an ocean inlet, but it would keep down the water, and so restore the feeding grounds for snipe and wild fowls. It is a fact, all reports to the contrary notwithstanding, that snipe and wild shot-larks are grown poorer annually, and an honest bayman whom I instruct to send for me when there is good duck shooting has not been able to send me the wished for message in two years.

The great objection to the opening into South Bay is the fact that the waters would become fresh, or nearly so. The water at the eastern end of South Bay is now so fresh that the horsefoot (*Limulus*) cannot live in it, and it is full of small pike, a variety inhabiting brooks and ditches.

ONEIDA LAKE POACHERS.—The New York *Telegraph* recently contained the following: "A Schwartz is needed at Oneida Lake. So hold have the illegal fishermen become that they threaten to kill the next game officer that appears. The Oswego *Palladium* says: 'They are lawless in their habits and it is not doubted that they will fulfill their threats. One man has thirty of these trap nets, worth \$40 apiece. If the enforcement of the law be insisted on it is believed that there will be trouble, and at the same time it looks cowardly for the Oneida County Game Association, which started the movement, to back out.' If there is such a thing possible as a thorough exposure of the illegal fishing on Oneida Lake it should be done. It is a notorious fact that is talked of among all classes in Central New York that the authorities dare not do their duty. The matter should be agitated all possible and the guilty ones, who compose the wealthier classes all round the lake, be brought to justice."

IOWA—Keokuk, Nov. 29.—We have enjoyed an immense amount of fine sport at this place this summer with the rod and line, and have caught some fine specimens of the black bass, striped bass, croppin, etc. What we need here is a strict enforcement of the State fish laws, and were they properly enforced we would have some of the finest fishing waters that there are in this State, or even in the West. I am in hopes to contribute something in the future in regard to the fish and fishing grounds of Southern Iowa.

W. H. D.

A FLORIDA PARTY.—Washingtonville, N. Y., Nov. 26.—My wife and self are preparing for a trip to the Gulf coast of Florida, having spent three winters there very pleasantly, our only drawback being a want of congenial companions. Should you know or hear of any gentleman who is fond of shooting and fishing, and his wife, not afraid of roughing it a little, you will please have them address Manata, P. O. Box 101, Washingtonville, Orange Co., N. Y.

Missouri—Solatia, Nov. 27.—Weather fine and quail and rabbit-shooting good.

OCCIDENT.

Game Bag and Gun.

SPORTSMEN AND LAND-OWNERS.

COMMENTS ON THE FOREST AND STREAM'S PLAN.

A NOTE published in your issue of the 25th inst. from East Rockaway, Queens County, L. I., and signed "J. H. Griffith," is replete with gross ignorance, spite, offensive references and unnecessary threats, and but for the prominence you give it would not be worthy of notice.

The writer's objection that the game laws involve an "encroachment upon the liberties of the people by the wealthier classes" and "an interference with the rights of the people to do as they please" evinces a desire to excite unworthy prejudices and shows an obtuseness of mental vision which would delight Dr. Hammond as a specimen from the Island.

All laws are in one sense an "encroachment upon the liberties of the people" by the dominating classes to which Mr. Griffith himself, if he owns a farm, belongs. What protects him in his property? What deters the ubiquitous tramp from encroaching and using Mr. G.'s house and barns, and what punishes the gentry if they invade their own rook or destroy their chicken-roost of his crops? And is a tramp not one of "the people" and outside of "the wealthier classes"? But for the laws he might, if the stronger, reverse his position and convert himself into a member of the "wealthier classes" and turn Mr. Griffith out of his possessions and into one of "the people." Does not this wandering factor in society consider this law "unconstitutional or that it ought to be?" But who should stand so stupidly for it and insist upon its enforcement than East Rockaway farmers? Who denounce "wee unto any man who disregards these notices" to keep off their farms?

Mr. Griffith, with felicitous inconsistency, stigmatizes one part and in the next instant calls for protection upon another portion of these very game laws. He and his neighbors have put up "the required legal notice." Whence is the authority for this notice derived and what is its effect? Why form these game laws which he so gibbly arraigns? But let us then a shooter on his or any other farmer's lands would in ordinary cases, where no special injury was done, be liable only in nominal damages—say six cents—for the technical trespass, whilst these laws assure him of any actual damage and entitles him besides "to exemplary damages to an amount not exceeding twenty-five dollars." The gunner, heedless thereof, is assured that Mr. G. and his neighbors will exact this point of view. Is not this part of the law "unconstitutional?" Mr. Griffith, "ought it not to be?" It would be difficult to compete with Mr. Griffith in his senseless appeals to the prejudices of the unthinking or ignorant. "Encroachments upon the liberty of the people"—"the wealthier classes"—"that unmitigated nuisance, the real sportsman"—"aristocratic trespassers" and such like phrases dance through his inflated imagination with all the inaptness and jumble of a Rockaway-claim-proclaimed nightmarer.

The experience of every sportsman has come in contact with a real sportsman will rise up and testify that a kinder, more genial, liberal, considerate and unaristocratic member of the human family than he, cannot be found on or off Long Island.

He does not "throw down" farmers' fences, or intentionally "wound their cattle," and if by accident any injury occurs from him to land, or living thing, the real sportsman is always ready and prompt to make full reparation. Nor does he place himself in his neighbor's way, if the latter, by his social position if he have it, or in any way or manner obtrude, or make himself offensive. He is retiring, and consorts on equal terms with all whom he meets. He is forgiving, too, as well as consoling; for should he meet even Mr. Griffith, he would shake his hand cordially, and assure him that he had not the slightest intention of invading his farm, and probably exclaim, "Lord! Griffith! the sea must have been running pretty high on the bar the other night before you overhauled your sheep."

No farmer is, notwithstanding Mr. Griffith's assertion to the contrary, "virtually the owner of the game" by which he is understood to mean quail and partridges. They are locally migratory birds—particularly the former—and feeding here to-day and there to-morrow. By what right then, does any particular farmer claim to virtually own them? If he were proprietor of all the country they might be his, but from the immemorial every where these birds have been regarded as *ferre nature*—wild birds—with ownership in no one until captured and in hand. The sole proprietor of them in their natural freedom is the people of the State. It is to the interest and enjoyment—and some cases the health—of the public that they should not be exterminated, hence the game laws and the prohibition against certain means of capture sure to exterminate them if permitted.

There is no question on this subject, and the cognate suggestion in your issue of the 25th inst., as to the "proposition to Gentlemen Sportsmen," but there is neither space nor time to discuss them at present. If this long screed does not weary and scare you I may return to it.

MANHATTAN.

Please add my name to your list of subscribers and send copies to this office weekly. I also wish to give my hearty indorsement to your scheme for the preservation of game. I will willingly pay any farmer from \$2 to \$5 per day for shooting over his land, where quail are plenty, or rather, say twenty to twenty-five cents for every quail brought to bag. There are plenty of quail on Long Island, at Moriches, Yaphank, Manor, Southwold, Good Ground, etc., etc., and if your plan were put in operation fine shooting could be had near at home.

I would also suggest that not only quail be protected, but that where there exists a town law against battery shooting, as in Moriches Bay, the law-abiding gunners should be encouraged in their efforts to prevent the lawless ones from batteries. There would be as fine shooting in this bay as anywhere, as the flats are wide and level plenty if the law were adhered to. This is one man, especially who uses batteries in the spring and by "driving" the birds curtails their stay in the bay. His name can be given if necessary. Geese are also plenty, but in regard to them a worse evil exists. The life-saving crew being near at hand, under cover of darkness fire-light them on their feeding-grounds.

This matter should be looked into by someone in authority. With all these disadvantages against good sport, I have shot over twenty-five days in the last season and seen a day in the bay. I would willingly subscribe my pro rata for an enforcement of the law to make the sport still better, as it does not continue good very long once fire-lighting takes

place. I have no doubt that a number of sportsmen would rather pay the full price of the game to law-breakers than have to travel miles for good shooting at heavy expense. I am one of them.

In going into the details of a scheme for preserving game, the following ideas suggest themselves to my mind.

Given a certain locality, the farmers of the township, village or hamlet organize a club for preserving game, (those not entering into the association to be debarred from the benefits of the club and to be prevented from illegally killing or snaring game of any kind by process of law. The members of the club constitute themselves into an organized body of game-keepers, appointing certain ones among them to see that the laws are enforced. To keep posted at the railroad stations nearest their town the names of parties, members of the association, where good board can be found; they also act as guides and keep tally of the game killed. A liberal rate to be fixed upon per bird, to be paid to the club, and the man or boy who acts as guide to be paid for his services, say \$2 to \$3 per day; a reasonable rate of board to be fixed. The funds thus earned to be divided among the members of the club. Advertisements to be inserted in good sporting papers of the localities where such clubs exist, with details as to board, rates, prospects for birds, etc., etc.

I think that these suggestions, conveyed to the farmers of Long Island in a liberal spirit by some of the game associations, would soon make as fine shooting grounds in our near neighborhood as can be found anywhere. The farmers' clubs would find it to their interest always to have plenty of birds, securing remuneration to themselves and sport to the gunner.

New York.

E. W. S.

If our sportsmen would invest a few dollars with the farmer boys and set an example of liberality they would have no trouble to monopolize all the desirable preserves they wish. I bought about 1,100 acres for a stock farm near this city, and I found the farmers very prejudiced against the town gentry (as they called them) hunting on their lands, and had noticed, but up warning them from going on their lands to hunt. I soon got the secret. Indiscreet hunters had been there and shot stock, frightened their cattle and left down fences and open gates. I tried a careful, generous course, by handing the boys a few dollars and avoiding all carelessness. I now have at least fifty coveys of quail and prairie chickens and rabbits in abundance on my own land, with almost unlimited privileges.

Five years ago I had to winter the Bob Whites among my fat cattle in my brush heaps. I cut and piled brush heaps, then threw wheat straw over the brush piles, and over eight quail wintered nicely. This winter has set in so hard I am preparing to do the same thing.

C. G.

I read with great interest the letters in the FOREST AND STREAM on the subject of protecting game. Keep it going; it will help to call the attention of true sportsmen to the dangers which threaten the extinction of game in our vicinity, and perhaps stir up the game clubs to a sense of the responsibility resting on their shoulders. I must say that I consider Long Island one of the worst-poached places in this State, excepting, perhaps, the Adirondack region.

I have shot and fished on Long Island a great many years and I know that the evils that "A True Lover of the Sport" complains of are only too true, and if our new society is a success we shall do our share toward breaking them up, whether the farmers like it or not. But I think that the farmers will find it greatly to their advantage to stop poaching and preserve the game.

MEMBER NEW PROTECTIVE SOCIETY.

New York, Dec. 3.

As you invite comment on your plans for bringing the sportsmen and farmers more into accord, I would suggest that the sportsmen put themselves in direct communication with the farmers for the purpose of securing food, lodging and a guide and companion for their sport instead of going to a hotel, where the charges would be higher.

It is generally conceded that the influx of sportsmen into any locality is the means of carrying a good deal of money into that place. This being so, why not give the farmers whose land furnishes the game the benefit of that money? It will also be the means of bringing the two into contact, and if the sportsman be a gentleman he may make a convert here of a farmer, whose previous ideas of a sportsman may have formed from the roughs or market-hunters he may formerly have thought fit to order off his place. As a farmer (and also, I hope, a sportsman) I know whereof I write.

Litchfield, Conn.

E. H. A.

As a sportsman and having a wish to pour oil on the troubled waters apparently existing between shooter and farmer, and also to start the ball rolling you suggest, I will guarantee to pay the boy or farmer on whose grounds I may shoot next season the rate of \$12 per 100 quail, or I will pay a reasonable price for permission to shoot and give one-half the birds killed on said grounds. Now, game preservers, come up to something that does look like action.

Brooklyn, N. Y.

SNOKE.

I fully indorse your plan as between farmer and sportsman in commenting on the letter of Mr. Griffith in to-day's paper. I have preached this doctrine to farmers and sportsmen wherever I have met them during my shooting for last five years and am glad you are putting it before us in tangible form.

Brooklyn, N. Y.

A. S. S.

I heartily approve of your plan for the removal of the differences of opinion between "the farmer's boy" and "the city sportsman."

New York.

Wm. D.

MINNESOTA DEER SHOOTING.—Pillbury, Minn., Nov. 30.—The open season for deer commenced in this (Todd) county November 1 and closes December 15. That the game has been reasonably plenty the following list will show: The Rain brothers (three of them) have killed 45 deer and 4 bears; Peter Aleshire, 20 deer; Loring Bachelor, 22 deer; Marshall Adams, 22 deer; Henry Adams, 17 deer and 2 bears; A. Pilsen, 14 deer; Peter Roy, 17 deer; Millard Aleshire, 16 deer; N. Kinney, 17 deer; Peter Roy, 18 deer; while almost every man in town has killed from 1 to 10. At least 4 tons of venison saddles have been brought in this village this season, and killed within a radius of ten miles. I am so glad to say that this little regard is paid to the game law, and in a few years the deer will be utterly exterminated. Pheasants, gray and black squirrels, coons, wolves, etc., are quite plenty.

J. F. I.

GUNS, POWDER AND SHOT.

PRACTICAL HINTS AND INSTRUCTIONS.

PARKERSBURG, W. Va., Nov. 23.

I HAVE read a number of rather scientific articles in your recent numbers, which I found very interesting and which could not fail to impart much valuable information to any sportsman. It is only within the past few years that the use of the shot-gun for shooting birds on the wing has become a science. The scientific knowledge of this manly and fascinating sport is yet confined to a very limited number of sportsmen.

The minute of shot-gun practice, if closely studied, show that to become an efficient marksman it is not only necessary to be a good shot, but also to regard the peculiarities of your gun, noticing closely the proper charge, the kind of ammunition best suited to it, etc. Every gun has its peculiarities, some requiring more powder and less shot, or less powder and more shot, a lighter or heavier wad, as the case may be. It is often found that two guns, supposed to be exact duplicates, charged exactly alike and fired under the same circumstances, will not give the same result, and it yet remains for the wisdom of future generations to discover some system of boring guns and loading them which shall insure absolute certainty and uniformity in every discharge. A sportsman is sometimes disappointed when he knows that his aim is correct, and he generally blames his gun, when, in all probability, the fault is owing to some defect in loading or in the quality of ammunition. Most guns shoot well when properly loaded and the finest gun will only give its best result when loaded just right. Many persons think that by using ridiculously large charges of powder greater penetration is obtained; others assert just the reverse. Discussion without practical knowledge is useless. By experiment only can such information be gained. My object is not to appear learned in this respect, but to offer a few suggestions which may lead to experiment and a more perfect knowledge where, in many cases, ideas have existed only on hearsay evidence.

Among beginners, and those who have not had large experience, the idea seems to prevail that a good gun should kill at from 100 yards to as far as the object can be distinctly seen. This is all a mistake. Forty to sixty yards is as far as any gun can be considered reliable. Shots may occasionally be made at longer range, but they are more the result of chance than calculation. The majority of birds killed in field-shooting are within thirty yards. In duck-shooting, which is a more successful range, the range is longer; but the most careful and successful sportsmen who have large experience, fly and seldom attempt long chance shots; sometimes made by amateur sportsmen, who think little of ammunition wasted in many unsuccessful long shots, but prefer the credit of occasionally making a brilliant exhibition of long-range shooting. A gun that will disperse two-thirds of the pellets contained in the load evenly in a thirty-inch circle at forty yards is an exceptionally good gun, and one that will put half the load in the same space may be considered a reliable field gun. The most important thing in a gun is an even distribution of the shot and penetration; these are not only dependent upon the manner in which the barrel is bored, but also on the way in which it is loaded, the sort of ammunition, etc. This may be regulated very much by varying the charge, or perhaps by using a faster or slower burning powder, as the gun may require. Among the peculiarities of shot-guns those which claim the most attention are scattering, concentrating, tailing or throwing the shot in bunches, penetration, recoil and vibration. All these may be regulated to a great extent by careful attention to loading.

In trying a gun, I would advise a forty-yard range. Target, a thirty-inch circle, with a pamphlet or pad of sufficient thickness behind it to show penetration by the number of pages penetrated. Regular penetration pads, made of sheets of paper of uniform thickness, may be obtained from most gun dealers. Find out how much powder of a certain brand your gun will burn by firing over white paper, a sheet, or smooth surface of snow; what is not burned can thus be seen. If it is of no use to load more powder than you can burn, it only increases the recoil and only that which is burned in the barrel propels the shot.

After finding out the largest quantity of powder that your gun will burn vary the load of shot. Shoot at least four loads of the same quantity in each barrel and take the average. For number 10 bore, 12 to 13 ounce; number 12, 3 to 14 ounce; number 14, 3 to 14 ounce. Try light and heavy wads, and those of one, two or three "pink edge" wads; examine them and see that they are perfect and as nearly the same thickness as possible. Wads that are thicker on one side than the other will be apt to turn while passing from the barrel, throwing the shot one side and producing a very irregular pattern. The lighter the wad over the shot the better. The thicker and more elastic the wad is between the powder and shot the less the shot will be knocked out of shape by the sudden concussion and, therefore, more pellets will reach the object. The breech-loaders should always be exactly the length of the chamber of the gun and ought to fit snugly in every way. Breech-loaders require about one-sixth more powder than muzzle-loaders of the same size.

In selecting a gun get it to fit you; one that comes up and balances well so it will naturally point at the object of your aim without requiring you to feel around to find the sight. When ordering state the weight, length of barrel, size of bore, length of stock from the front trigger to the middle of the butt plate, the drop of stock, measuring from a straight line with the top of the barrel to the top of the butt, also from same line to the top of stock just back of the grip, and as nearly as possible how you want it to shoot, whether a close or spreading pattern.

Too much attention cannot be paid to the quality and adaptability of ammunition. After deciding on the kind best suited to your gun use it only. Don't be changing all the time until you become weary of the result, and then, at the mercy of every wind, you might alight additional cost is often more than compensated for by an increased quantity of game, to say nothing of the satisfaction.

Improvements recently made in the manufacture of shot have set many to thinking and given rise to many theories. The subject is undoubtedly one of more importance than is generally supposed. The general idea for many years has been that if shot were uniform in size, spherical in form and smooth in finish, the best results could be obtained; every one considering only quality and not quantity, and putting into the gun, and not its quality upon its leaving the barrel and during its flight to the object of the shooter's aim. A number of years ago upon the introduction of hardened shot in England, various experiments were made, all going to show that soft shot, although absolutely perfect when put in-

to the load, were so deformed and out of shape upon leaving the gun, that a very large proportion of the charge was lost; this was owing to their being crowded against each other with such tremendous force by the explosion of the powder, and by contact with the surface of the barrel, that very few, if any, of the pellets retained their original shape. If any one will take the trouble to erect a soft target, eight feet square, made of plank thickly padded with cotton waste, or batting, stretching a cloth on the ground from the gun to the target, say forty yards, they will find upon firing soft shot that the pellets fail to fall at a very short distance from the muzzle of the gun and will be sprinkled along on the ground in an increasing ratio up to the target, and that the shot caught in the target are nearly all badly out of shape, many of them having indentations on their several sides from compression against other pellets while passing from the barrel. Most of the pellets which have fallen short of the target will be found to be flat, three-sided and have every shape except round.

A few years ago W. W. Greener, a celebrated gunmaker of Birmingham, England, published in a circular the results of a number of trials, proving conclusively that to secure the best result, it was necessary that shot should possess the qualities of perfection during its flight through the air, and to do this it must be hard enough to resist the concussion incident upon the discharge. Shot of an irregular shape, or mixed size, will have a scattering and uncertain effect. The principal quality of perfection in soft shot is that each pellet in a load should be of the same weight. If some pellets are heavier they will fly faster and in their passage throw the lighter ones out of range. This of course holds good with all drop shot. "Improved Chilled" shot possesses qualities of perfection that soft shot does not, resisting concussion and retaining its spherical form, flies in a more compact and uniform mass and therefore, meeting with less resistance in its passage, penetrates deeper; it will not flatten on the feathers of a bird, or skin of an animal. Squirrel shooters when taking off the skin often find many of the shot just underneath when soft shot has been used. In brush shooting hard shot is of great advantage as it cuts through the foliage and branches, then killing game where soft shot would allow it to escape. Shot that may be hard upon a squirrel would not secure the advantages to be found in an article of uniform resistance to concussion and of such toughness as to prevent splitting or breaking.

In June, 1873, the New York State Sportsmen's Association adopted a standard of sizes known as the "American Standard." The object was to induce all manufacturers to number their shot by the same scale, so that any specified size of the shot-makers conform to the standard. It did not seem there is a considerable difference in the sizes of shot made by different manufacturers. In experimenting, or for accurate shooting, it is necessary to know that shot is of the right size. Among other ridiculous theories is one which prevails only among those who form hasty conclusions, without consideration or experiment, that chilled shot may injure finely finished gun barrels. In loading the shot is poured in and settles into its place entirely by chance. It is not likely that the pellets in any load will settle in the same positions, therefore the points of contact of the different loads upon the surface of the barrel is never the same, so it could not cut or wear grooves as many suppose. The surface of the shot being smooth, no sharp edges or corners, it is impossible that the barrel could even be scratched. The shot in the outside layers of the load, even of the hardest metal, after being fired from a gun, will be found to have their sides flattened and ground off by friction in passing from the gun; but no pellets can be found so injured that they would not be able to scratch or injure a barrel. The shot which did not settle into its place in time and hard shot may wear out a trifle sooner, but the wear will be as smooth and uniform as by soft shot and so slow that no one will ever notice the difference.

Regarding "leading," about which there seems to be such a diversity of opinion, when a gun does become loaded it is with metallic lead, not plumbago or black lead, which is a fine lubricant, and the best safeguard against leading. To prove this, wash all the polish off the shot before using and note the result. Load several barrels with lead instead of shot and after firing several rounds, enough to dirty your gun, wipe it out clean and find any lead adhering to the barrel if you can. If it is remembered that plumbago is not lead and that its characteristics are such as to make it valuable to prevent the metallic lead, of which the shot are made, from adhering to the barrel, the great advantage of "patent finish" cannot be seen. The cause of guns leading has been satisfactorily explained; it seems to be peculiar to some guns. Your gun may be a good gun, but it leads with soft shot and not with hard; other will lead with lead and not with soft, and some will lead with either kind. Many do not lead at all. There are some powders that leave a hard and almost insoluble residuum. This is often mistaken for lead, especially when the gun has not been wiped before the accumulation has become hard.

The best way to treat a gun when loaded is to wipe it out clean, then rub plenty of strong mercurial ointment on the inner surface of the barrel, put in a warm place and the mercury will dissolve the lead, which can be easily wiped out with a rag; then polish the inside well with plumbago and it will be some time before it leads again. By this treatment there can be no injury to the barrels, as might occur by the use of a wire brush or scraper.

Powder used in breech-loaders is generally of coarser grain than that used in muzzle-loaders. The larger grain burning more slowly, allows of a larger charge and distributes the shot more regularly than the finer sharp powder. A powder that burns moist and can easily be traced by the hand is preferable to that which burns dry and hard. The recent articles on the manufacture of powder in the FOREST AND STREAM give the greatest information.

What is known as "baling," or the shot being thrown in bunches, seems to be dependent on various causes and can generally be remedied by care in loading. A shell that is too short or too long for the chamber of the gun may occasion it, or the use of powder that is too quick. Sometimes it can be cured by the use of a stiff wad or a wad of cotton, or shot, as the case may be; sometimes by increasing the wad between the powder and shot and it is often dependent upon the boring of the gun.

The great increase of interest in field sports during the past few years has so increased the number of experts in wing shooting that it has become necessary to protect game by law, especially during breeding season. The organization of clubs for that purpose has been accomplished much good in many localities, and it is to be hoped that the sportsmen will continue; that farmers and landowners will see that their interest in the matter is identical with that of the best class of sportsmen. If these two classes will work together for rea-

sonable and judicious game protection and the advancement of field sports in a gentlemanly way, the rougher and ill-bred class of boys who cause so much annoyance, and go out merely to butcher something, anything in fact, from harmless songsters to "barnyard pheasants," will soon be compelled to behave themselves or quit. Game laws should be so made as to protect both the interest of farmers and non-resident sportsmen, and clubs should be organized with this object in view and be able to aid in enforcing the laws by making members, whether farmers or non-resident sportsmen, game constables, with power to act at any time. Brenton.

One-half of the guns that are condemned by reason of their poor shooting are in no fault, the fault being in the user or the improper manner in which they are loaded. Is a gun to blame for having the charge improperly placed in its barrels? Is a horse to blame for being poor if it is poorly fed? Is a locomotive to be blamed and thrown aside if it is improperly used and consequently does not perform as its manufacturer intended it to? A horse may be a young, good blooded animal, full of life and vigor, but on passing into hands that do not know how to take care of and feed it, does not do the work assigned it in a satisfactory manner.

A locomotive may not be wanting in those essentials which constitute a masterpiece in the art: its proportion and strength may be such as to render it capable of lugging thousands of tons up the steepest grade, and yet, if it has not the proper amount of steam it cannot do the labor or work which it was designed to do.

The same argument holds good with firearms as well, and since the makers of "choke-bore" intended them to shoot well they also intended them to be properly loaded in order to do so.

For instance, take a No. 12 gun and place one dram of powder in it, and put an ounce of shot on top, and on firing at a target you will see at once that something is wrong. Its killing power is "very small," but on increasing the powder to 3½ drams we find a vast difference both in range and pattern.

The proper way to test a gun has been hinted at in these columns some time ago and was correct as far as it went, but there is such a wide difference in the bore of guns, especially the "choke-bore," that a set rule will not always win, consequently many a good, close, hard shooter is thrown aside with the fault in its owner.

J. W. Long says that choking a gun is performed by inserting a tool made for the purpose in the rear end of the barrel and working (turning round) it forward until a point not to exceed one-eighth or one-quarter of an inch from the muzzle is reached. This is repeated by placing a slip of paper between the tool "a short bar of three-fourths to one-half an inch square, steel, about six inches in length, the corners round and sharp, and welded to a handle of one-half inch ground-round the length of the barrel. To one side of this bit a thin, flat piece of pine or other soft wood, rounded on its outer side in conformation with the bore of the gun is fitted," and the wood, until enough boring is accomplished, when the gun may be tried at a target and if "sick" properly "doctored."

This constriction at the muzzle must affect the shot in their exit, hence the better the shot chamber at this point the more regular and even they are thrown from the gun. Some suppose the shot, more especially the large kind, should chamber at the breech; but this is a dangerous mistake in a closely-choked gun. A very fine shooting "choke bore" improperly loaded will "disgrace its race," and when the shot are chambered at the breech a cylinder-bored gun will outshoot the choke-bore in an astonishing manner. My plan, which I have found to win is to take a cardboard wad which will fit tightly in the muzzle and ram down about half an inch, and then try the shots and see if they will chamber, keeping the number of all the kinds you wish to use. Now load your gun with 3½ dr. of course-grained powder and 1 oz. of the shot you have found will fit at the muzzle, when you will be surprised at the evenness of your target if your gun is properly choked.

Always take a "rest," so you may know whether your gun always over, under, or sideways. If it does not suit all you have to do is to take your gun to the range and "chuck" to your heart's content. Chilled shot is better than soft, for the reason that they do not flatten at the choke of the gun, consequently they make better pattern and penetration. Some time since I saw a young sportsman trying a No. 12 at a target with B B and buck. He told me he did not know what was the reason his breech-loader would shoot them no better, saying, "They just chamber in the brass shell perfectly; now, what is the rip?" I loaded some of his shells and he tried my plan, and he was a decided success, much to his pleasure and edification.

Now, all who read this article that own poor shooting guns please test my method, and let me hear from you through the columns of FOREST AND STREAM.

I neglected to state that when buckshot were used the spaces between the shot as they are placed in the shell should be filled with bone dust. DELL.

South Centre, Minn., Nov. 26.

We want the name of every sportsman in New York City, and in other cities, who thinks that he can afford to pay the farmer's boy something for preserving the quail for him to shoot.

A DUCK SHOOT ON THE KANIKAKEE.

ON November 5, our party of four made an arrangement to go to the Kanikakee and neighboring swamps for duck shooting. At midnight, the time of taking the train, the weather was very disagreeable, raining and snowing. When we arrived at Momence, Ill., at 3:50 A. M., the snow was some four inches deep and still snowing. Our ardor was considerably dampened and we began to get a little blue over the prospects. But having come so far we determined to make the remainder of the trip. We left our baggage at the depot and went down for breakfast, after which we made inquiry as to the shooting. The resident sportsmen told us that the shooting had been good and was now a little "off," but with the present snowstorm they thought it would be good again on the river. We hired a livery team to take us eight miles up the river to Taylor's, with the understanding that we should be taken farther if we desired. On arriving at Taylor's he informed us that he could not keep us as his spare room was already occupied. He said the shooting was no very good at that point. He advised us to go up some eight miles to Brady's, for which point we

TUESDAY, DECEMBER 2.

The morning opened rough, with the wind blowing a gale from the north-west—a thing which, to test the scenting qualities of dogs, is an early start was made across the bay, at 8 o'clock, and another judge, Dr. J. C. Monroe, of Brooklyn, N. Y., was added to the trio which had acted in the Nursery and Puppy Stakes, and Mr. George T. Litch, of New York City, was appointed Referee. Treasurer Hall, the official scorer, with a view to signaling the decision of the judges, carried a flag of his own, and himself with a red and a blue flag, the waving of the former indicating a demerit and the waving of the latter a merit, but as no means had been provided for specifying which dog in the

League was under discussion, the spectators, held in check seventy-five cents behind by the field stewards, were not enlightened to any remarkable extent, but viewed the performance as one hidden in deep mystery.

Arriving at the island, overcoats were stowed away in the house near the landing and the contestants called together and addressed on the part of the judges by Dr. Rawlings Young, who tersely said: "Gentlemen, the judges in these trials propose to do their best in rendering their decisions, which shall be based upon the rules and upon their best judgment."

All-ages stakes open to all setters and pointers, limited to fifty entries. First prize, \$200; second prize, \$100; third prize, \$50; fourth prize, \$25. Entrance fee, \$25. Forfeit, \$15. Closed with 27 participants.

Entrée: P. H. Bryson, Memphis, Tenn., black and tan setter dog (Ladison) (Dun-Tetter) four and a half years.

T. H. Bryson, Memphis, Tenn., black and white setter bitch Peep

Two, Lakeland, N. Y., twenty months.

C. Dakota Wagstaff, Baby Lion, L. I. lemon and white pointer dog

Lord Dufferin (Golden's Dash-Hennessy's Fox), two and a half years.

Thurston Kennel Club, N. Y., lemon and white pointer dog

Sensation (John Nell), six and a half years.

Norton Acre, Providence, R. I., black setter bitch Smut (Pete-

Queen Bess), four and a half years.

Dr. S. Bloodgood, Providence, R. I., black and white setter

Dr. S. Bloodgood, Providence, R. I., black and white setter

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Iron Duke against Isabella.

SECOND BRACE—Mr. Bassford's black and white setter dog Iron Duke, handled by owner, and black and white setter bitch Isabella by Chester, out of Fannie H. winner of first puppy stakes at Mendon, 1876, and formerly owned by Mr. John Davidson, handled by Mr. W. Tallman, Drownville, R. I. The brace was slipped at 9:45 A. M. on same range, and along the northeast shore Isabella was penalized with a false point, and Duke for failure to back. The bank was followed around until the high ground was reached, when the brace was away to leeward of a briar hollow where some birds were heard calling. Isabella false pointed again, and again Duke raised a chase. The judges then ordered the brace up after being down a quarter of an hour with decision reserved.

Ray against Spy.

THIRD BRACE—At ten o'clock Mr. Livingston's white (with liver) setter dog Ray, handled by Mr. W. W. Titus, of Centerport, L. I. (now Circleville) aspiringly published, and Mr. Ripley's red Irish setter dog Spy by Duke, out of Belle, known on the bench as a winner, and handled by Mr. O. B. Edwards, of Sag Harbor, L. I., were put down. As the wind had increased in fury, a move was made for a more sheltered position at the south side of the island. On the way a bevy was flushed by spectators, Spy vinding at the time. The birds took the crest of the hill and were marked in a dense scrub. Then Duke, drawn back, dropped and pointed, Ray failed to back and passed on and flushed several birds. Edwards shot and missed, and both dogs showed great unsteadiness. Spy further on winded and flushed. Dogs ordered up by judges without chance to range or retrieve after ten minutes down, with Spy the winner.

Croxteth against Trim.

FOURTH BRACE—Mr. Croxteth's liver and white pointer dog Croxteth, handled by Philip Thurlte, and Dr. R. Day's (Norwich, Conn.) small liver pointer Trim, handled by W. H. Thayer, of Bristol, R. I. The brace was put down at 10:15 A. M. in a cornfield, and the rough, frozen ground was well beaten by both dogs. We had never seen Croxteth in better condition, which speaks well for Thurlte, who has had no end of trouble with him. He is a grand dog of the heavy bone sort, white, with a flash of the light, very build. Croxteth left off with a drab obliging across the field and pointed game-cock on the edge of the brush. Trim backed finely, but moved on as the judges crowded him. For this performance Croxteth was penalized with a false point and the back of Trim was not allowed, although he deserved it. A long sweep of grassy and brushy range was drawn blank, the beat unavailably leading down wind. Trim flushed a woodcock, but was not penalized, as it had been agreed that the trials should only be run off on small. The brush being reached, a detour was made along the shore to the extreme end of the island. On a sheltered range of rolling ground, intersected with strips of cover and ending in several large, grassy flats, the brace was cast off again. Croxteth at once winded and, with head well up in grand style, roared to a bevy, which flushed wild. Thurlte shot and missed and both dogs dropped to order. Croxteth, at edge of brush, pointed where a moment before we had seen a bird flush wild. Trim backed and the liver pointer was penalized for a false point, the judges not having seen the bird. Trim pointed where very struck, but left the scent, and Croxteth drew on forty yards on his belly and pointed like a rock, head up and stern down. Thurlte flushed and killed Croxteth, on being ordered to retrieve, took a few steps and pointed grandly on a new bird. The judges ordered Thurlte to take his dog off the point. He was pulled off and retrieved nicely. It was a grand exhibition of careful work, and the good style of the field. The judges, eyes, and Croxteth was pronounced the winner after being down fifty-five minutes, out of which there were twenty-five of actual work. This by no means, however, should infer that Trim is not a good working dog.

Sensation against Lizzie Lee.

FIFTH BRACE—In the same place on the grassy plain at 11:15 A. M., the Westminster Kennel Club made good their promise of showing that there was something more than looks in their stand-by, Sensation. The old fellow turned up drawn as fine as silk—perhaps too fine—and considering the many hands through which he had passed, Mr. S. T. Hammond certainly showed him at his best. Sensation was certainly in luck to be put down in the centre of a scattered and well lying bevy, and there was much curiosity expressed by the large numbers of spectators to see how he would come out. Among the number we noticed more than one who had been inspired with that fallacious idea that because a dog is a winner on the bench he is good for nothing in the field. This shows the danger of a good style to catch the judges' eyes, and Croxteth was pronounced the winner after being down fifty-five minutes, out of which there were twenty-five of actual work. This by no means, however, should infer that Trim is not a good working dog.

The following was the result of the drawing:

Glen against Dashing Monarch.

Ray against Isabella.

Ray against Spy.

Croxteth against Sensation.

Lizzie Lee against Peep o' Day.

Lord Dufferin against Fred.

Balish against Bessie.

Ward against St. Elmo.

Black against LaFay.

Stunt against Belle.

Globe against Nelly.

Madia against Grouse Dale.

Artion, 1876.

FIRST SERIES.

Glen against Dashing Monarch.

FIRST BRACE—It was quarter to nine o'clock when Dr. Atten's black, black and white setter dog Glen, the winner of the first of the braces, came into the ring, last year, handled by Mr. Sidney Blydenburg, of Long Island, and Mr. Higgins' black and white imported setter dog Dashing Monarch were cast down for the first heat. Monarch is a very handsome and powerful dog and was handled by Mr. E. J. Martin, of Wilmington, Delaware. In crossing the hill-side of the old stubble Monarch went lame in his near fore foot, having twisted it on the frozen ground. It appeared that soon after his arrival he had jammed his foot was bitten through, but it has not troubled him. In a moment, however, Monarch was himself again, and away he sped, showing grand style and pace, leaving his companion somewhat in the rear. On the strip of buckwheat Glen winded along the fence. Entering the briar and bayberry-brush range, Glen showed up a trifle headstrong. In a briar hollow Glen pointed and Monarch, being called off, followed suit, not seeing his dark-coated competitor in the dense undergrowth. The birds were not moved, although subsequently one of the spectators stirred them up, and Glen was given a false point. Monarch being called off, quartered to the shore, and Glen began to potter, winding up with a false point, which Monarch backed in good form. Monarch got his blood up and increased his speed. At the end of the scrub-oak strip near the shore a brace of birds was moved by Monarch flushing one and stopping at sound of wing. Glen backing, Blydenburg sent a charge of shot after the second bird, which flushed the dogs stopped. Monarch dropped to shoot and Glen to order. Monarch on being ordered on instantly pointed, and Martin flushed bird and missed. Glen rendered and pointed along inner edge of bush and Monarch backed. Both dogs roared on and Monarch forged ahead. Glen turned off sharply and secured an excellent point, and the bird was flushed. Shifting positions again Monarch pointed a single bird, and Glen backed, Martin moved in and shot. Glen moved in and five birds were flushed. Each hand was killed, and Monarch was ordered to retrieve. He at once beat a retreat and secured one bird, and on way back pointed the second with dead bird in his mouth. This he also picked up and carried it a few steps when he dropped it and delivered the other in style. Glen was sent for remaining bird, which he retrieved with assistance of handler. The brace was awarded to Dashing Monarch after the brace had been thirty minutes.

as to what was going on, and in our heart we believe he turned it to good account, but this is the more to his credit, for it shows he is not lacking in intelligence. No comparison can be drawn between Sensation and Croxteth, because they are of an entirely different type. The latter is a grand, powerful, lusty dog, with strong command, a goer and a laster. He is under most excellent command and free from most fanatics that dog flesh is heir to. Those that were fortunate enough to see these two dogs, one following the other, will long remember the pleasing sight. We were glad on our own account the pointers did so well, for we predicted as long ago as last March that there was good stuff in Croxteth, whom we had seen do good work on the farm and in the field, from personal knowledge, we suggested that it would be well to see Sensation first before decrying him. All the barn we wish those that have spoken slightly against the old dog is that they had been present and seen what we did.

Lass o' Gowrie against Peep o' Day.

SIXTH BRACE—Mr. Moore's very handsome blue setter bitch Lass o' Gowrie, handled by Mr. E. S. Wammaker, of Coalsprings, N. C., and Mr. Bryson's black and white young setter bitch Peep o' Day, handled by Mr. C. B. Whitford, St. Louis, Mo. The brace was turned down on the same range at half-past eleven A. M., and Peep o' Day at once pointed at a brace of birds. As previously stated, the brace was called up to back, which he did magnificently, and then put on the chain. Lass then backed beautifully. Whitford killed and Peep ordered to retrieve, which she did indifferently. Turning back the brace was given an opportunity to show their going qualities. Both ranged and quartered superbly, and showed up at this period of the heat as very evenly matched. Both dogs were very fast, but Lass o' Gowrie showed the better game. Circling round, Lass pinned a bird gradually while going great speed and dropped on her point. Peep backed excellently. Bird flushed; not shot at on account of spectators. The work was first-class and was duly appreciated by all present. Lass half pointed in grass and roared into the cover, where she dropped to point. Peep came up and failed to back. Spectators flushed two birds on coming up. Evidently the scenting in this case, after the first point, was not so advanced and became warmer as the wind came, and the dogs fell off considerably. The brace continued to do good work and as the heat was located so that spectators could keep the dogs in sight the interest never flagged. Lass dropped on half point where birds had been, Peep passed her and also dropped to point. Lass instantly moved up and backed, and this was repeated twice, the dogs roading and circling in various positions. At last, strange to say, maintaining the same relative distance, Lass advanced and the back of the dogs spoke volumes for the handlers. On top of hill Peep pointed where birds had just been moved and Lass backed instantaneously, sixty yards behind. A large range was drawn blank and Peep began to fall off in pace, though not in ranging. Lass pointed in briar hollow and the judges were about to give her a false point when Wammaker declared point. He stated that he could move the birds. Lass roared through briars, and up the far side the heavy flush of her. She was allowed the point, but penalized for slight, instead of when birds rose. Lass, in bunch of briars, pointed, and Peep backed. Wammaker flushed and killed, Lass dropped to wing and Peep to order and Lass retrieved perfectly. Lass pointed suddenly on slope beyond and Peep refused to back and birds were flushed. The brace was ordered up while judges compared their scores, and it resulted in the brace being turned down again. The judges then ordered the judges together again, and Lass was given the heat after running an hour and three-quarters. The scoring was said to have been very close, but Lass had shown herself the superior of Peep in training, being a much older dog, with more bottom and nose, and a much more useful cover dog, but not bold enough in the open at times. Lass was broken by L. H. Smith, of Stratford, Ont., and ran at Nashville, 1878. She won 2d New York show, 1880. Lass is a beauty.

Lord Dufferin against Fred.

SEVENTH BRACE—Mr. Wogstaff's lemon and white pointer dog Lord Dufferin, handled by Mr. W. Tallman, and Dr. S. T. Hammond's black and white pointer dog Fred, handled by H. H. Hight, Allaire, N. Y., were the next brace. Fred led off the scent in his nose. He roared along the fence by the strip of buckwheat turned out on the stubble and straightened himself out and pointed stanchly—a point of the old-fashioned sort. Lord Dufferin caught the hot scent along the fence and pointed. Hight flushed four birds and killed. Lord Dufferin dropped to shot and Fred to order, and a moment later he showed his quarry. The judges then ordered the brace to cross without cover, and the dogs showed up the field to cross without cover. The brace was ordered up, and the party ordered to luncheon at the house. Resuming at half-past two the same brace was put down on hill side of the old stubble, the brace dividing honors as to pace and style. At edge of brush a bevy was moved, which pitched into a briar patch in the field. Fred on reaching there pointed and Dufferin failed to back and shared point. Tallman flushed a single bird which he failed to kill. Both dogs retained point and bevy was then walked up. Hight killed and both dogs dropped to order. Dufferin was sent to retrieve and pointed where scattered birds had moved. Fred pushed past him failing to back. Dufferin then retrieved and dogs were ordered up with Fred the winner after thirty-five minutes actual work.

EIGHTH BRACE—Mr. Moore's red Irish setter dog Raleigh, handled by E. S. Wammaker, and Mr. Donner's pretty white and lemon setter bitch Bessie, handled by Theo. Predmore, Forked River, N. J., were the next brace. Raleigh was winner of second in All-ages stakes last year in same meeting, being the only dog to walk over, but he was decidedly off having been suffering from rheumatism all autumn, and recently increased by plunging into a cold spring. In briar hollow Bessie winded, showing a delicate nose, and further on on hill side again drew and pointed. Predmore then managed to get her a false point, which later on was withdrawn as birds were flushed. Raleigh in splendid style roared and pointed, and Bessie backed. The birds were evidently in the brush; Raleigh continued to rood; Bessie backed him and pointed. The judges then ordered the brace to cross without cover, and the dogs showed up the field to cross without cover. The brace was ordered up, and the party ordered to luncheon at the house. Resuming at half-past two the same brace was put down on hill side of the old stubble, the brace dividing honors as to pace and style. At edge of brush a bevy was moved, which pitched into a briar patch in the field. Fred on reaching there pointed and Dufferin failed to back and shared point. Tallman flushed a single bird which he failed to kill. Both dogs retained point and bevy was then walked up. Hight killed and both dogs dropped to order. Dufferin was sent to retrieve and pointed where scattered birds had moved. Fred pushed past him failing to back. Dufferin then retrieved and dogs were ordered up with Fred the winner after thirty-five minutes actual work.

lessly. Both dogs warned to their work, and Bessie showed herself to be a sharp working, busy little animal. Raleigh going down wind flushed a brace. Bessie on crown of hill dropped to point, got up and roared. Raleigh, a jealous worker crowded her and a brace of birds was flushed by handler off to one side. That Bessie might show her qualities as a retriever, a dead bird was thrown up and a gun discharged. She dropped to shot, and retrieved the bird down wind very prettily. The heat went to Bessie at 3:35 p. m., after being down within ten minutes of the hour.

Warwick against St. Elmo.

TENTH BRACE.—Mr. Gause's lemon and white setter dog Warwick, handled by Mr. E. J. Martin, who handled Dashing Monarch, and St. Elmo, handled by Mr. J. S. Elmo, handled by Mr. Jefferson Cooper, of Bladensburg, N. Y. St. Elmo, besides being a well-known brace winner, has won in the field at Hampton, Iowa, 1877, at Robin's Island, third in All-aged stakes last year, and second at the Nebraska trials last autumn, having at the last-named place a score of 804 out of 100. The cast off was in the brush, and as the brace started away there was little to choose between the two, so evenly were the dogs matched. St. Elmo dropped to point in the brush heap; Warwick backed instantaneously; bird was flushed by judges on coming up. Both dogs showed grand training and that they were at home in the corner. Rusty they took their turns, and Warwick made his score good by pointing and St. Elmo backed. A single bird was moved, but not shot at. In open pasture both dogs moved and quartered nicely. At edge of brush St. Elmo dropped to point, got away and roared. Warwick backed. St. Elmo continued roading, twisting and turning through the brush over the dry fence, and making but little noise. Warwick followed each turn, treading also, passing through the brush over one hundred yards. St. Elmo on reaching the open brought up on a dropping point, and Warwick, close behind, backed, his head and tail up, a beautiful piece of work for both dogs and the best reading of the trials. The bevy was flushed and a bird killed, both dogs dropping to shot. St. Elmo retrieved finely. The dead bird was then thrown out and gun discharged for the benefit of Warwick and he retrieved it to perfection, setting up and holding bird up, as all dogs should be trained to do. A few scattered birds dropped on the crown of the hill, and there both dogs secured a point and half a dozen birds were moved. The heat was a hot one, the most evenly contested one of the trials, and ended without one single error for either dog. In hollow Warwick pointed in grand shape and a bird was moved. Again on hill-top in less time than it takes to write both dogs pointed a single bird, a grand picture, and on slope leading to a brushy gully St. Elmo pinned a bird, this time standing, and Warwick backed across him, the dog being near enough to cover with a cloth. The heat, which was a nip and tuck one to the other, was given to St. Elmo, who had little the best luck and was perhaps a shade quicker in his turns; but both dogs were rattlers, and cannot be spoken of too highly for work done in this heat. The race lasted thirty-five minutes.

Rush against La Guy.

TENTH BRACE.—Mr. Orgill's lemon and white pointer dog Rush, handled by Mr. Orgill's new kennel man, Charles A. Gladstone, of Baltimore, Md., and Mr. Moore's liver and white pointer dog La Guy, handled by E. S. Wamaker. The dogs were much of a size and a remarkably fine-looking brace, again showing the strange good fortune of the draw. La Guy at once began to show Rush the way and Rush took two looks at a long stretch of land and followed. Rush flushed bevy on opposite side of hollow and seemed to together off. We then learned that not expecting to be run until the second day, and not being among the braces ordered early in the morning, he had been worked until noon and given two fees. Under these circumstances he should not have been allowed to run. Rush false pointed and Guy backed. Rush moved on and Guy came alongside and both pointed. Both dogs were so much of a size and pointed so accurately, that, being heads up, one or the other dog was completely hidden, for their tails were held up the same way, of the same length, thickness and curve, and it was impossible to see the one further off, although the dogs were several feet apart. As the north shore was reached the full force of the wind, which was blowing a gale, was felt, and Guy made an unfortunate flush. Guy then false pointed and Rush backed grandly. Guy luckily took the briars and landed himself first in the stubble field, where he flushed a bevy, the birds being on a large stand. The bevy scattered along the shore in some weeds and grass. Guy pointed in briars and Rush went in and flushed, thus extinguishing his chance for the day. The brace was ordered up after being down twenty-five minutes, with decision reserved.

As the tide was at ebb the little steam yacht could not make the landing and it was late before the party was conveyed on board by small boats and the welcome lights of New Suffolk were sighted.

At the evening meeting of the club the following gentlemen were proposed for membership:

Messrs. Benj. M. Earle, Providence, R. I.; Newton Earle, Providence, R. I.; R. C. Cornell, New York; H. S. Bloodgood, Providence, R. I.; Dr. S. Fleet Spier, Brooklyn, N. Y., and Crump Ormsby, New York City.

FRIDAY, DECEMBER 3, 1880.

The day opened as badly as it could for the running of the dogs, a terrific northwest gale sweeping the island and freezing one to the marrow. The bay was crossed betimes and the field taken at quarter past nine.

Rush against La Guy.

TENTH BRACE.—Continued.—Rush and La Guy were again ordered down to finish their heat of the preceding evening. The road was taken to the south end of the island, that the dogs might be worked in a sheltered position out of the fury of the wind. On hill-side beyond the last gully leading to the east shore a bevy was flushed wild by the judges. Rush showed much better going qualities than on the afternoon before and seemed awake to what was going on. Both dogs worked jealously. On bank in scrub-oaks La Guy pointed and Rush also winded at same moment and pointed and a single bird was flushed by the noise. La Guy dropped to wing. Rush, on a hill, flushed a bird and the brace was cast off at 10:05 a. m., after being down fifty minutes, with La Guy the winner.

Snuat against Belle.

ELEVENTH BRACE.—Mr. Earle's small setter bitch Snuat, winner with Grouse Dale of second in brace at Robin's Island, 1879, handled by T. M. Aldrich, of Providence, R. I., and Mr. Stanley's medium-sized black and tan imported setter bitch Belle, winner of first in champion class, New York, 1880, handled by Mr. C. Townsend, of Englewood, N. J.

Belle started off as wild as a hawk and showed up as a very free goer. The brace had been put down on same bevy on the dry leaves in brush along the shore. Belle flushed a bird and chased, which was not seen by the judges; she then pointed finely in hollow and Snuat refused to back; went in and took point. Townsend flushed and Belle ran in and chased. Snuat, after being rolled over, dropped to order. The brace was ordered up, to be put down later, at discretion of judges. Time of heat, ten minutes.

Gladstone against Nat.

TWELFTH BRACE.—Mr. Bryson's well-known black, white and tan setter dog Gladstone, handled by C. B. Whitford, of St. Louis, Mo., and Mr. Bloodgood's small black and white setter dog Nat, handled by T. M. Aldrich, Providence, R. I., was the next brace, at 10:15 a. m. They had been appropriately termed by Mr. Aldrich as the giant and the midget. Gladstone was turned down in fine condition and is, beyond question, the best built dog for going that we ever saw. He swept off at a terrific pace coursing over hill and dale with tremendous strides, his style being simply perfect. To the astonishment of every one they Nat kept his little legs going to such good purpose that after being down five minutes a half a mile of the heat had gone before order and judges and spectators were alike left in the rear, and the little fellow was not a bad second. On went Gladstone at an air-splitting pace, now and again slightly checking to the wind and off again like a bird. At one word and hint from Whitford he would drop to a trot in the brush and away again in the open. Nat was all business during this trying ordeal. When the highest ground had been reached on the east shore, Nat pointed in a briar patch where birds have been running. There was no one present save the two handlers, Judge Von Lengerke, who throughout kept well up with the dogs, and one or two others and ourself. Whitford called Gladstone up, and as he rounded the briars he caught sight of little Nat and backed. Nat was ordered on, and quick as a wink Whitford, who was letting Gladstone go for all he was worth, circled him on ahead and in a moment he brought up standing in grand form forty yards away on the bevy which lay along a hillside, pointing them at fully twenty-five yards away. Snuat stopped roading and backed perfectly. Gladstone was awarded point and Nat a back, who against any other dog and handler would have been in first, as he had undoubtedly been the first to find. The bevy sprung wild, and Gladstone dropped to wing and Nat to order. On hill top the bevy pitched, and Nat got there first and pointed in some briars where birds had struck and run down in a brushy hollow near a fence. A moment later, Whitford, who was in the hollow below, sent Gladstone up. On coming, the dogs were in the brush, and he had passed between the briars and the fence some fifty yards when suddenly he whirled and came to a dropping point, with his head turned round toward the fence, and there he pointed like a rock, beyond question one of the finest points we ever saw or ever expect to see. The birds were moved along the fence in the brush thirty yards away. In a hollow filled up with briars, through which led a narrow path, Gladstone winded and pointed, went on and beat out the opposite hill side, round and in same path pointed and Nat backed, and the bevy flushed very wild and topped the hill. On hill top in bunch of briars Nat suddenly pointed, and Gladstone, who was a few feet back to one side, the next moment pointed a different bird. Three birds were moved, a brace in front of Nat and a single bird by Gladstone. Whitford shot and missed; Nat dropped to wing, and Gladstone to order. It was then asserted that Gladstone had been called off point a few minutes before in some place where Whitford supposed to have been the place from where the bevy jumped. All this was very true, and the credit for the full credit for an excellent find and great staunchness. Both dogs were scored a point by the judges, but Nat certainly had the best of it. Further on in a bushy hollow Gladstone pointed, and Nat, twenty feet behind, backed splendidly. A bird was moved, and Whitford's wing broke it. On being sent to retrieve Gladstone passed the briar several times, failing to locate it. Nat on being ordered to retrieve crawled up the steep bank and returned at once with the bird alive, an excellent performance. On the bank Gladstone pointed and Nat came up and backed splendidly. A bird was moved, but not shot at. The dead bird was thrown into the bush and a gun discharged and Gladstone retrieved properly. The brace was ordered up at 11:10 a. m., after being down five minutes under the hour, with Gladstone the winner. There is no doubt that Nat three times during the heat showed either Gladstone or his handler the presence of the birds first, and he was carefully reading Gladstone's handler would boldly give him the first. It was a very creditable performance for little Nat, who seemed backed and retrieved in much better form, but though he has a clipping pace for so small a dog he was out-styled and out-paced from the start, but in our opinion Nat won the heat, as it was a race between dogs not handlers.

Iron Duke against Isabella.

SECOND BRACE.—Second Opportunity.—Mr. Bassford's Iron Duke and Isabella, handled by Mr. Tallman, were again given a chance. The brace was cast off at 11:10 a. m., in the scrub oaks on the same bevy. Isabella potted and Duke half pointed, went on and flushed bird. Bassford shot and Duke failed to drop to shot. After being down quarter of an hour, Iron Duke was given the heat.

Snuat against Belle.

ELEVENTH BRACE.—Second Opportunity.—Mr. Earle's Snuat and Stanley's Belle had their second try at 11:40 a. m. The brace was cast off in the corn field. A bevy was flushed wild in the scrub oaks and not followed. A long range of brush and hilly country was drawn blank, and it was not until the extreme western side of the Island was reached that a feather was moved. Snuat then pointed a bevy in a briar patch near a salt marsh. Belle circling around the cover came up, failed to back, and shared point. A large bevy was flushed and a bird shot down wings. Belle broke shot and Snuat retrieved nicely and won the heat. As it was not 12:40 p. m. a move was made to the house for luncheon and a rest taken until 1:10 p. m.

Maida against Grouse Dale.

THIRTEENTH BRACE.—Dr. Spier's black, white and tan setter bitch Maida, handled by E. H. Haight and Mr. Goodwin's Grouse Dale, by W. Tallman. Resuming where bevy had been flushed before luncheon. Both dogs showed good pace and ranging powers. Grouse Dale false pointed, and Maida backed to order. On edge of impenetrable briar thicket Maida pointed and birds ran, while waiting for Grouse Dale to be brought up. Grouse Dale failed to back and roared off to one side. The birds came out of the brush. On hill-top in brush both dogs pinned a bird between them. Haight shot and Maida broke shot and chased very badly, which threw the heat to Grouse Dale after being down forty minutes.

SECOND SERIES.

Afternoon against Dashing Monarch.

FIRST BRACE.—Mr. Lincoln's orange Belton, better dog of Afton, who had a bye, a well-known winner on the bench, handled by Mr. Hammond, and Dashing Monarch, by Mr. Martin, were turned off at two o'clock. Monarch found bevy on edge of brush above the stubble field and pointed in grand form very staunchly. Afton backed finely. Martin shot and killed. Both dogs dropped, and Monarch retrieved perfectly. The bevy split, part of the birds sailing into the briar range where most of the birds had dropped to for shelter. Afton on lowest stubble half pointed and went on. Afton quartered finely and showed up as a wild ranger. Monarch, however, took the lead and in scrub-oaks along the shore pointed, and Afton backed. A brace of birds were flushed and the heat given to Monarch, after running half an hour.

Iron Duke against Spy.

SECOND BRACE.—Iron Duke handled by owner, and Spy by O. B. Edwards, were cast off in same place at 2:30 p. m. The bevy was flushed while waiting for dogs, which scattered in the long sedge grass. Iron Duke flushed a single bird, and a second and a third. Spy flushed a bird in brush, and Iron Duke secured a point in the grass. Spy bounced around Iron Duke failing to back, and the bird was flushed and Bassford missed. Iron Duke pointed staunchly, and Spy backed to back. This gave Iron Duke the heat, after being down fifteen minutes.

Sensation against Croxteth.

THIRD BRACE.—Sensation and Croxteth came together being handled by Hammond and Thurlie. There was considerable private betting on the result of this heat and great interest felt by all present. Sensation led off with a flush of a single bird, going down wind, and chased. He then turned into the brush and pointed; Croxteth came up and pointed behind, also having the scent. The bird was moved and hard hit and Sensation partly retrieved, biting bird badly. Along the fence by the backfield field Sensation again showed his excellent nose by pointing in the ditch with his head level with the field beyond. Croxteth came up and backed and went on past Sensation, failing to catch the scent. Hammond killed and the bird was not recovered, although both dogs had a chance to retrieve. Sensation false pointed and Croxteth backed. Croxteth pointed and Sensation coming up behind, fifteen yards away, caught scent and pointed, not seeing Croxteth. Thurlie killed and Croxteth retrieved excellently. Along the fence Sensation dropped suddenly to a single bird crawling point, with his head turned downwards. He was firm as a rock. Croxteth came up, backed, pointed. Over him, became uneasy, went in and flushed brace, thus ruining his chance to be placed. Sensation continued to hold his point and, being ordered on, caught a winged bird he had directly under his nose. The heat was given to Sensation after lasting twenty-five minutes. It was evident that Croxteth's nose was off from the start.

Lass o' Gowrie against Fred.

FOURTH BRACE.—Lass o' Gowrie, handled by Wamaker, and Fred by Height. In hollow Fred made a grand point and Lass backed; single bird was moved. Lass made dropping point, and on being sent on the bird was flushed ahead of her. Fred false pointed in brush heap and Lass backed. Lass was then awarded the heat after being down half an hour.

Bessie against St. Elmo.

FIFTH BRACE.—Bessie, handled by Predmore, and St. Elmo by Cooper, were ordered down in stubble field. Bessie sailed off, showing a lively pace and outspurring her competitor. Upon reaching the far side the brace was ordered up for the day, as it was already dark, and the party was soon steaming to New Suffolk.

SATURDAY, DECEMBER 4.

The morning was one of the most perfect ever seen for the season. The wind had died out and the warm sun shone brightly, without a cloud in the sky. Later on a slight breeze from the N. W. stirred the tops of the grass and enabled the dogs to do some fine work in the exposed portion of the island.

Bessie against St. Elmo.

FIFTH BRACE.—Continued.—Shortly after nine o'clock Bessie and St. Elmo were put down on grassy valley at the south side of the island. Bessie struck a scent and pointed down wind, worked around and flushed a good sized strong flying bevy, which skirted the valley and towered over the brush on the crown of the hill. Bessie upon going down wind in cover along the shore, had several birds flush very wild by the noise in the dry leaves, St. Elmo being away behind. Bessie pointed staunchly and several birds were moved. St. Elmo false pointed along bank and Bessie failed to back. A move was made across the opening to where birds had been marked. Here Bessie pinned a bird in sedge field form, being very staunch. St. Elmo came up and backed for a second, crowded in on the bitch and flushed and chased badly, which ended his chances in the race. Bessie won handsomely after running twenty minutes. No one who had seen the superb work of the dog on the first day would have imagined that it was possible for him to show such unsteady work. Mr. Cooper was certainly greatly astonished as he had handled St. Elmo with full confidence. It shows that dogs, like white men, are at times "mighty unsmart."

La Guy against Snuat.

SIXTH BRACE.—La Guy, handled by Wamaker, and Snuat by Aldrich were cast off along the south-east shore, both dogs winded, and a single bird was moved. Fairly on both dogs roared, and near South Point one of the judges flushed the bevy. In sedge grass Snuat pointed and La Guy backed, a gun was shot at each of the three birds that moved. On extreme point La Guy pointed single bird and Snuat flushed. When this decision was rendered it occurred to Aldrich to take the change out of the little bitch. St. Elmo scored a false point when he had already birds running in front of him and Snuat failed to back. She then passed two birds on the sandy beach and crawling up, left the bank picked up the bird La Guy had been roading, left the trail and pointed fresh bird, while La Guy was kept at charge. The heat was given to Snuat after running forty minutes, which decision we consider a premature one, to say the least, as La Guy had shown the best work.

Gladstone against Grouse Dale.

SEVENTH BRACE.—Gladstone, handled by Whitford, and Grouse Dale, by Tallman, were put down on same range of sand hills along west shore of island. Grouse Dale troubled the scorers with a flush along the beach. In briars in open, Grouse Dale pointed and Gladstone backed; a brace was flushed. Tallman killed. Grouse Dale broke shot badly, retrieving when ordered very cleanly. Birds were passed along

the beach. In briar hollow Gladstone half painted, Grouse Dale pointed brace, and judges in going to him moved bevy to windward of where Gladstone was rounding to. Gladstone false pointed and Grouse Dale made a capital point, Gladstone backing grandly. Single bird moved and Grouse Dale dropped quickly to wing. Grouse Dale again pointed bird in thick briar, Gladstone again backing. At shot Grouse Dale again broke in. This unsteadiness on his part was what was beating him, for he was picking up his birds in grand style. By a little pond Grouse Dale flushed a single bird. Gladstone in brush pointed: bird shot at and missed. Gladstone pointed in same place and bird was killed. Gladstone sent to retrieve, located fairly and returned quickly with bird. Gladstone won the heat, after brace had been down forty minutes.

THIRD SERIES.

Dashing Monarch against Iron Duke.

FIRST BRACE.—Dashing Monarch and Iron Duke. Both dogs flushed. Monarch false pointed in dropping position and Iron Duke failed to back. On top of ridge Duke flushed and Monarch was awarded the heat, after being down forty minutes.

Lass o' Gowrie against Sensation.

SECOND BRACE.—Lass o' Gowrie and Sensation put down on same range along the northeast shore. Lass got quickly away and false pointed badly. Sensation backed in form. It was evident Lass was far from being herself. A long range was drawn blank, the birds, from having been disturbed so much, hid away in the brush and dense briar thickets. Sensation pointed staunchly in hollow and a small lot of scattered birds flushed wild. In a briar patch Sensation false pointed and Lass dropped to back. The judge, recognizing that Lass backed, as the birds were not moved, Lass was scored a false point. Sensation winded and howled through the thick briar-bushes and pointed. Hammond was ordered to take him off point and Sensation was given the heat. This Wamaker stated was done while Lass was pointing, and being dissatisfied with the judge's decision he left the ground.

Smut against Bessie.

THIRD BRACE.—Smut and Bessie were cast off in the scrub oak belt along the beach. Bessie pointed and Smut passed her on point and flushed bevy. Both dogs, however, were awarded a point. Smut pointed and Bessie backed, but was given a point. Along the shore Smut pointed and Bessie failed to back. The judges, recognizing that Bessie was handicapped by having an inexperienced handler, allowed the heat to run longer than if otherwise would have done. Smut won after brace had been down just half an hour. A half hour was taken for luncheon and a very acceptable rest.

FOURTH SERIES.

Gladstone against Dashing Monarch.

FIRST BRACE.—Gladstone and Dashing Monarch were put down in briar range and a bevy which was flushed by spectators made a long flight and was marked down in brushy ravine along shore. There Monarch secured a capital point on hill side and Gladstone backed. The bird was flushed and killed by one of the judges and Monarch broke shot, but checked himself after going a few steps. He then retrieved splendidly. Behind brush, where we could not see, a bird was flushed, both dogs being there. Monarch was found pointing staunchly, and we subsequently learned that Gladstone had circled around him and had made the flush. Gladstone came up and backed and Martin this time shot and killed. Monarch dropped to shot, showing the necessity of the handlers doing all the shooting. Gladstone was sent to retrieve, and the bird turned out to be a winged one. He then pointed dead, and the bird fluttered up again, and he flushed a fresh bird and chased, which was excusable under the circumstances. Gladstone then plunged into the briar and retrieved the winged bird alive. It was a grand piece of work, but he should not have been subjected to an ordeal that is apt to mislead any dog. Gladstone pointed a bevy very finely, and after being down three-quarters of an hour the heat was given to him.

Sensation against Smut.

SECOND BRACE.—Sensation and Smut were started in briar lot, along the shore in scrub-oak belt. Smut pointed and Sensation backed indifferently, three birds were moved, Smut turned to the left and after going six yards pointed bevy. Sensation failed to back and shared point alongside. The birds were flushed and both handler shot and killed, but the birds were not moved. Sensation retrieved. Smut again picked up a bevy in brush and Sensation backed her. In picked up a bevy on shore Smut rounded where birds had been and Sensation followed suit. Across the fence in the stubble edge Sensation came to an excellent point and Smut backed; a brace of birds were flushed and one killed, which Sensation retrieved indifferently, biting the bird. The heat was awarded to Sensation after the brace had been down twenty-five minutes. This decision caused great dissatisfaction, and the owners of Smut and Sensation, who were present and had seen the running, withdrew their dogs from the trials. There is but one opinion in our mind, and that is that little Smut had the best of it from the start.

FIFTH SERIES.

Sensation against Gladstone.

Sensation and Gladstone, at 2:40 P. M., met at last for first place. Gladstone flushed a bird and Whitford rang in a shot. Sensation pointed and single bird was flushed. Gladstone flushed a single bird; he then, across the fence, along shore, roaded, having the bird in brush and Sensation plainly showing his overwork. He was tired and used up. Gladstone again flushed a bird and it seemed that the retrieving of the winged bird in his heat with Dashing Monarch had unsteadied him. The brace was then taken beyond the house to the west, while a lot of imported birds were planted along the shore in the grass. The dogs were then swung around to the leeward, but both failed to make birds out on being brought to the spot. Just at night Sensation winded a bird in a weedy way, and before he could establish his point, Whitford sent Gladstone down on the beach, where he secured a magnificent point. A consultation among the judges was held and the decision came up from the beach that Gladstone had won, after being down fifty minutes. Reviewing the heat and number of flushes made by Gladstone, we consider that the old pointer showed the best nose and work, and should have been the winner.

SIXTH SERIES.

Sensation against Dashing Monarch.

In the moonlight Sensation and Dashing Monarch were run for second place on the same birds. Monarch pointed a sin-

gle bird and Sensation backed; at shot both dogs showed unsteadiness. Monarch pointed another single bird and Sensation again backed. Thus Monarch landed the second prize with ease and the judges awarded Sensation third place.

A discussion then ensued about the interpretation of the club rules, and it was found that according to their absurd wording (in a dog, that had not won a heat, was the fourth winner. The following is a summary of the heats as they were run in series and the list of winners:

SUMMARY OF THE RUNNING OF ALL-AGED STAKES.

FIRST SERIES.

Dashing Monarch	beat	Glen.
Iron Duke	"	Isabella.
Spy	"	Ray.
Croxteth	"	Trin.
Sensation	"	Lizzie Lee.
Lass o' Gowrie	"	Peep o' Day.
Fred	"	Lord Dufferin.
Bessie	"	Raleigh.
St. Elmo	"	Warwick.
La Guy	"	Rush.
Smut	"	Belle.
Gladstone	"	Nat.
Grouse Dale	"	Malda.

After a bye.

SECOND SERIES.

Dashing Monarch	beat	Afton.
Iron Duke	"	Spy.
Sensation	"	Croxteth.
Lass o' Gowrie	"	Fred.
Bessie	"	St. Elmo.
Smut	"	La Guy.
Gladstone	"	Grouse Dale.

THIRD SERIES.

Dashing Monarch	beat	Iron Duke.
Sensation	"	Lass o' Gowrie.
Smut	"	Bessie.
Gladstone	"	bye.

FOURTH SERIES.

Gladstone	beat	Dashing Monarch.
Sensation	"	Smut.

FIFTH SERIES.

Gladstone	beat	Sensation.
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First prize, \$200, and special prize, Fox gun, to Gladstone.

SIXTH SERIES.

Dashing Monarch	beat	Sensation.
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Second prize, \$100, to Dashing Monarch, judges awarding third prize, \$50, to Sensation; also winner special prize, silver cup, for best hunting of any stakes. Fourth prize, \$25, to Glen, under the rule, being the best dog, in their opinion, beaten by second-prize winner.

A PLUCKY CHALLENGE.—Mr. Horace S. Bloodgood, of Providence, R. I., has forwarded a challenge to the owners of Gladstone and Sensation, offering to run Nat and Smut either in braces or singly on Robin's Island against those two dogs, a two days' match for \$1,000, each party to select a judge and they to select a referee.

THE CARE OF DOGS.

CHAPTER III.

THE sickening odor which greets our entrance at most of the prominent kennels is due not so much to the unobscured dresser's portion as to the unsuccessful effort or total neglect to remove all traces of impurity from the floors and lower portion of walls and under benches. Dusting doors with sifted road dust to the depth of one-sixteenth of an inch and cleaning out for a fresh supply each day will keep them disinfected; but the parts most needing attention are the walls and sides of sleeping benches. After removing all bedding and dust from floor the sides should be scrubbed with a broom and rinsed by dashing clean water over them. A rigid adhering to this practice will enable the kennelman to dispense with carbolic acid and other troublesome disinfectants. Carbolic acid is good in its place—especially in the hospital quarters where there are cases of a loathsome nature and where it is not convenient or advisable to freely use water upon the boards; but for general use in the kennel I cannot endorse it. That an excessive quantity exposed is injurious to the olfactory nerves (though the injury be but temporary), few who have studied the subject will hesitate to assert. Knowing that a theory which cannot be brought down to practice remains but a theory, as we say that it does not directly affect those most sensitive nerves; let us only say that it interferes with their natural power of scenting game and let us prove it beyond a possibility of a doubt by a very simple practical test, which any person can make without going into a scientific discussion.

To prove that hair—not only the coat of the dog, but human hair—will absorb and retain a great amount of scent, let a person remain for half an hour in a kitchen where fish, oysters or onions are fried or fragments cabbage boiling; let them walk in the open air until the clothing is free from all taint, then apply your nostrils to the hair of their whiskers or head (if no hat was worn in kitchen) and tell them what they saw cooking. You can do it, provided your "dose and stobbed up" with a cold.

Now, to test the scenting power interfered with by carbolic acid, or the scent of it, upon the hair, against the same power under ordinary circumstances. Take small tin or wood boxes and label them on the bottoms as they are filled with a very faintly-scented mixture of flour and one of the following aromatics for each box: Cloves, allspice, cinnamon, ginger, lemon peel, orange peel. Dilute each until the person upon whom the test is being made can only detect and distinguish the aroma by the greatest possible exercise of his olfactory, each box being held four inches from the tip of the nose. Now moisten his mustache and the hair of his head with a very weak solution of carbolic acid (or let him sleep during the night in a room corresponding with the kennel disinfected by carbolic acid), let him walk around the room in which the test is made twice before placing the boxes successively at the aforesaid distance from tip of nose, and ask him to distinguish lemon from orange, ginger from cinnamon, or cloves from allspice, and note the difference in the time required to do distinguish, if he succeeds at all.

In applying this experiment to the dog we find no difficulty. His coat is all hair, it absorbs and retains an immense amount of

scent when kept over night in a closed kennel impregnated with a powerful odor. This scent is retained for a considerable length of time, even in open air. His power of scent is keen and delicate to a degree not exceeded, we believe, by any other animal. The scent of the bird is sometimes strong, often faint, and it must be detected at a considerable distance to be of use to the dog and master. Now is it not reasonable to suppose that this powerful scent carried in and thrown from the coat of the dog will interfere materially with his detecting and locating the scent of the bird?

Beside all this, I have frequently seen dogs made deathly sick by the odor of this most excellent disinfectant. So much for carbolic acid.

There are times, such as rainy days and freezing ones, when scrubbing and wet boards are out of the question; for a wet kennel on a rainy day when the dogs are or should be indoors, is quite a serious matter, breeding colds, rheumatism, and often distemper. When scrubbing is out of the question, with care should be taken to keep up all droppings, and on the first bright, warm day give the neglected places a thorough scrubbing and a thin coat of whitewash early in the morning, so as to allow it to dry perfectly before night. The beds should be cleared of all droppings, vomit or litter, and the straw turned over to air, if not renewed. Don't sweep the pile just outside the door and leave it; but remove it to the manure pile and keep your yards clean.

To clean kennels and yards I owe my success as a kennelman. No case of mange or distemper has ever originated at our kennels, nor (as I remarked before) have we lost a single case from any disease this year. I boldly assert, without fear of contradiction, that one half of all diseases to which canine flesh is subjected are the result of filthy kennels, improper food and mismanagement.

It would make your heart sad to visit some of the noted kennels of the East and the West and look upon the dogs crowded together in a filthy den, the stench of which is almost unbearable, and chained with a four feet chain to a diminutive square bench, upon which they may manage to curl, but cannot stretch out their cramped and weary limbs. Their eager, pleading eyes beg earnestly for air and freedom. Or look at the score of high strung ambitious champions of the bench and field confined in the narrow, cramped, high-fenced close pens, more fit for slaughter-house muckpans than for the permanent quarters of sporting dogs.

Why do sportsmen and breeders persist in ignoring the fact that the respective natures and provinces of the dog and hog are totally different and widely separated? Might not that account for some of the porky performance shown at our field trials by dogs from which we looked for better things?

Dogs will dig when they get the chance. Let them dig, the exercise is strengthening and the excitement a wholesome stimulant and the fresh mold an excellent disinfectant. If they are in yards drive stakes along the bottoms of the fences to prevent digging through; if on exercise wires drive stakes around posts to prevent becoming loose, and carefully block or prop up any house or small kennel which they may undermine, so as to prevent its falling upon and injuring them.

It is no use to attempt filling up the holes permanently before the ground begins to freeze. The best you can do to warm weather is to move wires and houses to new ground—a decided advantage under all circumstances. Where the size of grounds will not permit a change or removal, plow or break with a cultivator about one third of the ground at a time each month until the whole is turned over, then begin at the first part and repeat the process. It is worth the labor expended.

EVERETT VAN CLEIN.

DEER HOUNDS AND THEIR TRAINING.—In regard to the training of deerhounds, I have often inclined to the belief, that like poets, they are born, not made, for I have seen hounds which had been trained all their lives to run foxes, in this case, deerhounds, never having seen nor smelled deer track; when put on the latter task with alacrity and delight to the nobler game, and ever after pass a fox track with silent contempt, and a good judge can usually select those which are likely to do this thing. It is necessary that a first-rate deerhound should possess in a high degree courage, endurance, speed and intelligence; their heads should be wide in proportion to their length, ears well rounded and not over-long, muzzle broad, and lips not too pendulous; chest deep and broad, and forelegs well set apart; their feet should never be put on the track before they are one year old as their strength is, before that time, not always equal to the task of holding out till the game is brought to bay, and this sometimes affects their endurance afterward, but not necessarily. Young dogs should, if possible, always be put on at first to company with old and well-tried hounds; if this cannot be done, then the trail should be followed, and the dog encouraged to take the track before he has seen it. He should be repeated till the deer is caught, if possible. There is a vast difference in the manner in which deer hounds run their game. Some which will never leave the track, while on dry ground, will return the instant the deer takes water, even if the stream is less than a foot in depth; others will cross streams which are not beyond their depth, but decline to swim, and will be at fault if the game courses up or down the stream; others again, will upon their game-taking water, swim across and follow up, and down the bank for miles, then recross and do the same on the other bank, and develop more than human sagacity in searching out the trail. These are the deer hounds *par excellence*, and readily command from seventy-five to one hundred and fifty dollars. When a hound leaves a track, for any reason except inability to follow it farther, he is worthless, and should be discarded.

PENROBERT.

WESTMINSTER KENNEL CLUB'S OFFICERS FOR 1880.—The following is the list of officers to W. K. C. for 1880: Genl. A. S. Webb, President; C. DuBois Wagstaff, Vice-President; Robert C. Corneli, Secretary; Edmund C. Stanton, Treasurer. Board of Governors.—Alex. S. Webb, Wm. F. Morgan, Robert C. Corneli, C. DuBois Wagstaff, Elliot Smith, George De F. Grant, Walter S. Webb, Lewis B. Wright, Wm. A. Haines, E. C. Stanton, Lewis K. Willard, H. C. Mortimer, Wm. A. Haines, E. C. Stanton, William S. Webb. The club is in a most flourishing condition. A number of important improvements have been made on club grounds at Babylon. As the club has no vacancies, it is proposed to increase the members to 100.

"Rex"—*Ashfield, Mass., Nov. 26*—Noticing Mr. Lathrop's communication, I would merely suggest that this is a very large world, and that there are several dogs in it, and that it is entirely possible to have even a "dog man" occasionally catch pedigree or blood a little mixed, and yet not be generally

considered as particularly ignorant or perverted in consequence. RUFFED GROUSE.

PENNSYLVANIA BENCH SNOW.—Mr. Chas. Lincoln will reach Pittsburg, Pa., this week and enter into his duties as Superintendent on the 10th inst. Major J. M. Taylor, of Lexington, Ky., has been selected as one of the judges.

—Mr. J. J. Snellenburg's address is at New Brighton, Pa., not New Castle, as published in account of Vincennes trials.

KENNEL NOTES.

NAME'S CLAIMED.

Harold.—Mr. Geo. Schofield, of Toronto, Canada, claims the name Harold for his liver and white cocker dog puppy by Flusher out of Daisy, purchased from M. P. McKoon.

Halidee.—Mr. Geo. Schofield, of Toronto, Canada, claims the name Halidee for his liver and white cocker bitch puppy by Ned II. out of Daisy.

Tip.—Mr. W. D. Dotey, of Greencastle, Indiana, claim the name Tip for his black, white and tan setter dog puppy out of Bessie Lee by imported Penn.

Maed.—Mr. Charles W. Stewart, of Ft. Madison, Iowa, claims the name Maed for his setter bitch puppy, purchased from Mr. S. A. Kay, of St. Louis, Mo., by Dan out of his Flora.

Grace II.—Mr. E. W. Saporata, of New York, claims the name of Grace II for his pointer bitch, 11 months old (Sensation-White's Grace) litter sister to Gregory's Belle, winner of Nursery stakes at Hoboken, N. J., 1880.

Dien.—L. R. Landy, of South Framingham, Mass., claims the name Dien for his red Irish setter bitch, whelped December 11, 1879, by Champion Berkeley out of Rockwood's Star, who by Elcho out of Fattler's Elcho.

Surd.—Mr. E. L. Seely claims the name Surd for his red Irish dog puppy, whelped August 31, 1880, out of W. N. Callender's Queen Boss by Rory O'More.

Silent Partner.—Dr. A. McGollum, of this city, claims the name Silent Partner for his liver and white pointer dog puppy, whelped at Peaskill, N. Y., October 17, 1880, bred by Dr. Wygant out of his Fly by his Marie. Marie, 1st prize N. Y. C., Class 48, No. 756; Fly out of Whitman's Fannie by his Carlo; Carlo imported, 1st prize St. Louis, 1879; Fly, McKoon's Flora and name; Flora by Boston's imported Juliette and Snipe; Snipe by McKoon's Nellie and Captain; Nellie by Fusa and Fly, both imported; Captain by Boston's imported Romeo and Juliette.

Trump.—Dr. H. B. Wygant, Peaskill, N. Y., claims the name Trump for liver and white pointer spaniel dog puppy, whelped Oct. 17, 1880, out of his Fly by Marie.

In your issue of 2d inst., Mr. Line F. Kellogg, of Princeton, Kan., claims the name Lady Elcho, for a bitch mentioned in the same issue as sold to Mr. Southers of Ottawa, Kan. I ask that the animal may be given another name, as I claimed the name Lady Elcho for my Loo-Elcho bitch, April 3, 1880.

C. E. WING, M. D.

WHILPS.

Jessie.—Mr. E. A. Herzberg's Jessie, dam out of Champion St. Elmo, whelped December 3, 1880, two dogs and two litters to his pure Laverack Aldershot.

Mich.—Mr. E. F. Mercillotti's celebrated first prize English pug bitch Mich was whelped five dogs and one bitch.

Black.—Mr. F. D. Bassford's Newfoundland bitch has presented her owner with a litter of ten puppies, seven dogs and three bitches, by the same owner's Lion. All the pups are black without a white hair.

Gypsy.—Mr. C. W. Bassford's (White Plains, N. Y.), red Irish setter bitch Gypsy, whelped Dec. 4, 1880, nine puppies, four dogs and five kysps, all red by Elcho III. A brace of dogs and kysps will be disposed of.

DEATHS.

Dayton.—Dr. J. J. Jennelle's red Irish setter bitch, Dayton (Bob-Duck) died Thanksgiving night from distemper. She was in whelp to Elcho II.

PURCHASES.

Setters.—Mr. E. F. Mercillotti has purchased from Mr. William Hall, of New York City, a brace of pure black English setter dogs of excellent strain and careful breeding.

Carles.—Mr. J. O. O'Leary, of Hornellville, N. Y., has purchased a A. A. Scwell the liver and white cocker bitch Carles (dark-Funno, little sister of Sailor Boy (first at Rochester) and of Little Buttercup.

Bernhardt.—Mr. J. O. O'Leary, of Hornellville, N. Y., has purchased of Joseph DeBarrie the liver colored bitch Bernhardt and six pups by his Fly.

Princess.—Mr. J. O. O'Leary, of Hornellville, N. Y., has purchased of Frank Ammon the black and white ticked bitch Princess (Widow-Dolly).

Squid.—Mr. J. O. O'Leary has purchased of John Prunell the black cocker bitch Squid (Widow-Tonic).

WYNS.

Usner Fritz-Waldine.—Mr. Wm. Loefler's dachshund bitch Waldine, first prize St. Louis, 1880, was bred November 21 to Dr. T. Twaddell's Usner Fritz, winner of Continental medal and special prize, Philadelphia, 1876; first and special prize, Baltimore, 1877; first and special prize, Philadelphia, 1878; has a fine healthy litter of seven puppies, five dogs and two bitches, out of Countess Lusa (Drake-Countess Vesta) by Mr. Fay's Coin. They were whelped October 26.

Black Jess-Dash.—The black and tan setter Black Jess, (1,066 N. A. K. C., Stud Book, Vol. 1.) owned by Mr. James T. Walker, Troy, N. Y., was bred to same owner's Dash (956 N. A. K. C., Stud Book), Dec. 4, 1880.

Rosindale-Lelaps.—Dr. C. E. Wing's Rosindale by Dash III. was bred Dec. 3, 1880, to Susan's Lelaps.

SALES.

Lady Thersia.—Dr. J. J. Jennelle, of Du Quoin, Illinois, has sold his Irish setter bitch in whelp to Elcho II. to Mr. R. G. Sylvester, Carbondale, Illinois.

Harold.—Mr. M. P. McKoon, of Franklin, N. Y., has sold to Mr. Geo. Schofield, of Toronto, Canada, a liver and white cocker dog puppy out of Daisy.

Halidee.—Mr. M. P. McKoon, of Franklin, N. Y., has sold to Mr. Geo. Schofield, of Toronto, Canada, a liver and white cocker bitch puppy out of Daisy by Ned II.

Syph.—Mr. E. F. Mercillotti has sold his beautiful orange and white fox terrier bitch Syph to Mr. John Mackey, of New York City.

Jed.—Mr. E. F. Mercillotti has sold his Newfoundland dog Jed to Etienne Hale, of New York City.

Ed.—Mr. Wm. W. Truslow, of New York, has sold a brace of pointer pups out of his imported Nell by Mr. Orgill's Champion Rush to T. Branch, of Morris-town, N. J.

Fly-Music Whelps.—Dr. B. Wygant has disposed of his "Fly and Music" litter as follows: A dog to Mr. Robertson, of Peekskill, two dogs to Dr. A. McGollum, N. Y., one of which died; one died of membranous croup. One dog he keeps, not for sale.

CURRENT DOG STORIES.

XV.

One of our citizens had a business week of the time. One morning last spring his master started to come up town, and the dog wanted to accompany him, but was not allowed to do so. It was a sore disappointment to the dog, and he made great complaint. He stood on his hind legs, with his fore paws on the window, and watched his master out of sight. After a while he was let out, and

trotted about the yard for a short time, and then started off, and that was the last seen of him. It was learned that he went out a mile and did not stop until he had reached a neighbor's some miles away, where he has since remained.—*Ashblatta, O., Sentinel.*

XVI.

One of the two most prominent dogs of our day—Prince Dis mark's Tyras and Viscount Hugo's Senat—the latter has just joined the canine majority, full of years and honors. The "Red Dog," who relieved historical immortality two years ago by out-living the venerable Gortschakoff when the celebrated diplomatist was paying an official visit to the German chancery, still lives to dismiss troublesome depredations and terrorize importune petitioners. But Senat, the great French poet's faithful friend and constant companion during many years of exile, has succumbed to old age at Hawthill House, and received interment in the grounds of that romantic retreat. With him was buried the silver collar presented to him somewhat late in life by his master, whose senatorial experience of the docility toward royal authority exhibited by the first French legislative chamber in pre-Napoleonic days probably suggested to him as admirably appropriate to "the most obedient of dogs" the name he bestowed upon his favorite. Upon this collar was engraved the following dithyramb expressly composed for Senat by the author of "Crisi-rime": "Je voudrais au plus grand des honneurs. Mon chat? Chien. Mon maître? Hugo. Mon nom? Senat." For the benefit of our readers, we translate: "I wish some one would like me home. My profession? Dog. My master? Hugo. My name? Senat."—*London Telegraph.*

XVII.

The family of James Herrington, of Stapleton, S. I., while seated at the supper table on Tuesday evening, had their attention attracted by a squealing noise in the kitchen closet. On making an investigation, Mr. Herrington discovered a rat with one of its legs fast in the door of the closet, and he heard the animal uttering a loud cry. By the time the rat was found the rat had managed to make its way out of the closet, dragging the clam with it. The cat at once attacked the rat, but the latter, notwithstanding its crippled condition, showed fight, and succeeded in penetrating into the yard, carrying both the rat and the clam with her. There the rat, still held prisoner, was killed by the cat.—*Sun.* There was a dog in this story, but he got left.

Here is an authenticated instance of practical joking fitly reciprocated: A friend of mine has a rough-haired collie, wise and expositively modelled. One evening a lady of the household, with whom he was a special favorite, stooped quietly, as he lay with his head on the rug, and placing her face close to his head, and sharply with a slight shout in one of his ears. Tickled and startled, he jumped up and moved off, seemingly somewhat offended. In the course of the evening the lady happened to be reclining in an easy-chair, when she observed by a glance of the inmates to rise, and making a circuit, to move stealthily toward the chair, put his fore paws on one of the arms, and placing his nose close to the lady's ear, to give a sharp bark and instantly bound off.—*Spectator.*

THE CHASE: ITS HISTORY AND LAWS.

(Continued from page 310.)

THE paintings on the Egyptian tombs and the bass-reliefs of Nineveh and Babylon, which, after the long lapse of ages, have in recent times been brought to light, and the Jewish history, which, though we may not be certain as to the precise date at which it was composed, still undoubtedly carries us back into a remote antiquity, have afforded us some insight into the habits of these nations as regards the sports of the field. It is only at a much later period that we become acquainted with the sports of the hunters of the modern world. Our first knowledge of the Persians and Medes, as hunters, is derived from the Greeks, who in Asia Minor have been the subjects of the Persian Empire, or, as regards Greece itself, were brought into contact with the Persian court or rulers after the Persian wars. But a long interval separates the Egyptian or Assyrian monuments from the writings of Herodotus or Xenophon, and we are therefore unable to say at how early a period the passionate love of the chase, which in the days of these writers has acquired such large dimensions, and which became a national characteristic of the Persians, had its first commencement. In its existence, as a national institution materially influencing the national character, ancient writers, both Greek and Roman, are agreed.

The hunting parks, of the Persians and Medes were, if we may trust the Greek writers, on a still grander scale than those of the Assyrians. Curtius, the historian of Alexander's campaigns, who of course could personally have known nothing of the matter, but is said to have drawn his materials from early and reliable writers, speaking of these inclosed parks, tells us that the conqueror having entered with his army into one of these parks, in which the game had not been disturbed for a long time, a slaughter of four thousand head ensued, after which the king frustrated the whole army in the park. Of course the story would not have been complete if the narrator had not made his hero slay a lion with his own hand. He accordingly does so, and represents the king as disdainfully rejecting the assistance of Lysimachus, one of his generals, who offered him up as he was engaged with the lion, and peremptorily ordering him to retire. Out of this incident, adds Curtius, arose the story of Alexander having ordered Lysimachus to be thrown into a pit with a lion, whom, however, Lysimachus succeeded in killing. More reliable is the statement of Xenophon, as showing the extent of these enclosures, when he tells us that the whole of the Greek army of Cyrus, then amounting to 13,000 men, and in which Xenophon was himself serving, was reviewed in one of them. On another occasion the Greeks received private information that a large array of the enemy was stationed in a neighboring park. An instance of the extensive scale on which the royal hunting establishments were organized is to be found in the statement of Herodotus, that the tax imposed on four large Mesopotamian villages was that of maintaining the royal hounds in the Babylonian satrapy, in consideration of which these villages were exempted from all other tribute.

We are informed by the Greeks that the Persian youth, in the earlier period of the monarchy, were regularly trained to the chase, as well as to horsemanship and other martial exercises, as the means of developing their physical powers and preparing them for the hardships and fatigues of war and the business of arms. At the latter period at which Xenophon wrote, these habits are said by him to have fallen into desuetude—to which, as one of its causes, in his enthusiastic love of the chase, he goes so far as to ascribe the decline of the Persian power: the more rational view of the matter perhaps being that the downfall of the nation and its easy subjection by the Macedonian conqueror were to be ascribed, not to the disuse of hunting and other active exercises, but to the growing effeminacy and luxurious habits which led, among other evils, to the abandonment of the chase and the other manly and warlike pursuits of their fathers.

Of the other Eastern nations of the period we are treating of we know little or nothing, though at a later period we read of some of them—for instance, the Parthians—as being passionately devoted to hunting. All we are acquainted with as regards India in this respect is that the Indian hounds

were acknowledged to be the finest then known, from which we may infer that the chase had been energetically cultivated in that country. It may be assumed that the other nations of the East had not been behind their Assyrian, Egyptian, or Persian brethren in following what seems to be the common, and as it were insinative, propensity of man, more especially as in these countries wild animals were abundant, and the facilities for hunting great.

The mention of Greek historians brings us to the Greeks themselves. But here the beginning of history is lost in the obscurity and mist of fable. Even Xenophon, in his treatise on hunting, has nothing better to tell us of its origin than the legendary story that hunting and the training of hounds were the inventions of Apollo and Artemis, who imparted the discovery to Chiron, who in his turn instructed the long list of heroes whom the writer enumerates. But, as has already been observed, the existence of the legend itself shows how deep was the sense of the benefit resulting to mankind from the services of the hunter in the destruction of wild beasts. It shows, too, that the Greeks were from the earliest times a nation of hunters. Nor could it well be otherwise. A country intersected in all directions by mountain ranges, covered with forests, would be prolific of wild animals, of which an active and energetic population would not fail to take advantage. When we come to the historical times, we are told an idle story, for which there seems to be no sufficient authority, of Solon having forbidden hunting to the Athenians. It is certain that, if any such law was ever pronounced, it never was enforced or obeyed. In Sparta hunting is said to have been enjoined to the young and active by public authority, and hounds were maintained at the public expense. Hounds of the Spartan breed were much esteemed, as were also those of Crete, which probably differed but little, if at all, from those of Sparta. We have to thank the recorded excellence of the Spartan hounds for the exciting and vivid description of a pack of hounds which Shakespeare, who had probably been reading some old work on hunting, gives us in the *Midsummer Night's Dream*. Ilioplyta begins:

I was with Hercules and Cadmus once,
When in a wood of Crete they bayed the bear
With hounds of Sparta, which I never saw,
Such gallant chiding; for besides the groves,
The skies, the fountains, every region near
Seemed all one mutual cry: I never heard
So much a discord, such sweet thunder.

To which Theocritus answers:

My hounds are bred out of the Spartan kind;
So loved, so wooed, in Crete, that the seeds are hung
Upon their backs; sweep away the morning dew,
Creek-knead and dew-lapped like Thessalian bulls;
Slow in pursuit, but matched in mouth like bells,
Each under each, a cry more tunable
Was never heard of, nor cheered with horn,
In Crete, in Sparta, nor in Thebes.

Whether hounds were used by the early Greeks, for the purpose of running down the game, or only for that of finding and bringing the fiercer animals, such as lions and bears, to bay, for the purpose of their being speared by the hunter, and of driving the smaller sort, such as hares and deer, into the net, and so capturing them, appears to be doubtful. From several passages in the *Iliad*, especially the spirited description of the Cretan bear hunt, as also from that of the bear hunt mentioned in the *Odyssey*, in which Ulysses is represented as having been wounded by the bear, by the spear of which wound he was first recognized on his return to Ithaca, it is clear that in the Homeric age hounds were used for the first of the purposes above mentioned. But in these instances no mention is made of their employment for the sole purpose of catching the hunted animal. On the other hand, in what is said in the *Odyssey* by Eumæus, of the old hound Argos, it would seem that hounds were sometimes used for the purpose of pursuing. For Eumæus says of Argos that no animal, if once caught sight of, could escape from him, while at the same time his power of scent was perfect.

Be this as it may, as regards the Homeric age, the use of the hound for this purpose solely was unknown in later times, as may be inferred from what Xenophon says on the subject.

It is to this accomplished Athenian, the general, the philosopher, the friend of Socrates and Plato, and at the same time a sportsman, that we are indebted for the earliest treatise on hunting. It is a treatise of three kinds of hunting—hare-hunting, stag-hunting, and bear-hunting; but the work is principally devoted to hare-hunting, which was plainly the favorite sport of the author, who evidently would not have agreed with the poet Thomson, when he says:

Poor is the triumph o'er the timid hare.

The work in question gives the fullest account of this form of hunting; but the sport is certainly not such as, according to our ideas, would be deemed sportsmanlike. It consists not in the fairly running down the hare by the hounds, as acted by the skill of the huntsman—a result which, according to Xenophon, seldom occurs, and which he seems to think it too slow and tedious to pursue—but in driving the hare, by means of the hounds, into nets placed in various parts of the woods, when entangled in the net, she is to be knocked on the head by an attendant stationed there for the purpose.

(To be continued.)

Weakness and sickness changed to health and strength with Hop Bitters, always.

The Bile.

RANGE AND GALLERY.

PORTLAND, Me., Nov. 25.—There was a general day's shooting at the Fort Preble butts to-day, though the weather was not all that could have been desired, and the wind blew in such a way as to greatly bother the contestants, but nevertheless the shoot between teams from the Mechanic Blues and the Cadets resulted in a fine exhibition of marksmanship. The range was 200 yards. At 2:30 p. m. both teams faced the targets, and the Cadets won the toss. Privates Baker and Dow led off, the former opening with a "mias" and Private Dow with an "outer," closing with 60 points. Cap-

The photographic copy of "Frysbyng Wyth an Angle," by Dame Juliana Berners, A. D. 1496, for sale by Mr. Bouton, is a handsome "plummet" in the old "black letter." Our readers will do well to remember that we have several copies of the delightful old book, edited by Mr. George V. Van Sicken, handsomely bound and in good plain type with the quaint spelling preserved, which we can supply at \$1.50 per copy. A few rubbed copies at \$1.25. Send your orders to this office soon.

Answers to Correspondents.

No Notice taken of Anonymous Communications.

R. F. W., New York.—Send address to this office.
P. F. B., Jr.—See advertisement of paper elsewhere.
G. H. D., Jr., Carson City, Nev.—See answer to J. McE. in last issue.
W. H. B., New Hampshire.—Write to the game dealers, whose names you will find elsewhere.

F. G., New Preston, Conn.—It is impossible to answer your question satisfactorily. We are collecting the information and will shortly publish.

C. T. R., Asahle Forks, N. Y.—We know of no such arm. The auxiliary rifle barrel will probably answer your purpose, if you already have a shot-gun. 2. Thanks for the names.

K., Baltimore.—For Currituck shooting see our issues of April 1 and 22, 1880. The route from Norfolk, go by steamer Signet. The grounds are pretty well taken up by clubs and the points are occupied by professional shooters.

W. C. M.—1. Dr. Coates' Key; Hallock's Gazetteer and the Forest and Stream will tell you about game birds. A summary of all the ornithological matter which has appeared in this journal is now in course of publication. 2. Bound volumes of this paper \$3.50.

E. F. P., Carson City, Nev.—Edwin S. Harris, of this city, whose advertisement you would have found had you looked for it, does not confine himself "exclusively to leather legging." It is a good rule to look before you leap, and never to take an editor to task before you know that you are right.

H. S. C.—1. Is La Pueblo in Colorado Territory a good place in

winter for a person to reside in who is subject to rheumatism and asthma? also Topeka in Texas and St. Paul in Minnesota? 2. What small game would there be found near La Pueblo, and would a dog be necessary there? Ans. 1. On Denver correspondent, W. X. B., kindly supplies the desired information. Pueblo and South Pueblo are contiguous towns, separated only by the Arkansas River, one hundred and twenty miles south of Denver and having between four and five thousand people. A suffer from asthma would almost certainly be relieved immediately and the effect upon rheumatism would doubtless be beneficial. In fact it is claimed that mineral water from an artesian well recently bored there is a specific for that malady. 2. Geese and ducks along the river in spring and autumn. Jack rabbits and "cotton tails," plenty. An occasional grouse in the brush along the river, or among the bluffs. Not much use for a dog.

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"	"	"	13 50	"	13 50	"	"	"	28 00	"	32 00
"	"	"	7 75	"	7 50	"	"	"	14 00	"	16 00
Very Heavy	"	"	11 25	"	18 75	"	"	"	11 00	"	13 00
"	"	"	11 50	"	15 00	"	"	"	24 00	"	26 00
"	"	"	5 75	"	5 25	"	"	"	6 00	"	6 50
Heavy	"	"	12 00	"	12 50	"	"	"	5 00	"	12 00
"	"	"	5 00	"	9 00	"	"	"	5 00	"	8 00
"	"	"	4 00	"	4 00	Regular	"	"	16 50	"	24 00
Salmon	"	"	10 50	"	12 00	"	"	"	7 00	"	10 00
"	"	"	7 00	"	8 00	"	"	"	5 50	"	8 00
"	"	"	3 50	"	9 00	"	"	"	3 75	"	5 50
EX Hvy Bass	"	"	10 50	"	10 50	Extra Heavy Double	"	"	21 00	"	21 00
"	"	"	6 00	"	7 00	"	"	"	18 00	"	21 00
"	"	"	3 00	"	3 50	"	"	"	9 00	"	10 50
Heavy	"	"	7 50	"	7 50	"	"	"	7 50	"	9 00
"	"	"	5 00	"	5 00	"	"	"	16 50	"	21 00
"	"	"	2 50	"	2 00	"	"	"	11 00	"	16 00
Black Bass	"	"	4 00	"	7 50	"	"	"	3 50	"	8 00
"	"	"	4 00	"	4 00	"	"	"	5 75	"	5 75
"	"	"	2 00	"	2 75	Regular	"	"	11 25	"	16 70
Trout	"	"	4 50	"	4 00	"	"	"	7 00	"	11 00
"	"	"	3 00	"	3 00	"	"	"	3 50	"	5 50
"	"	"	1 60	"	2 00	"	"	"	2 75	"	3 95

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Babylon, 8.35 A.M., 3.35, 4.35, 5.35 P.M. Sundays, 9 A.M.

Col. Pt. & Whitestone, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35, 4.35, 5, 6, 6.35, 7, 7.35, 9.15, 10.15 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.25, 7, 10 P.M.

Flushing, 6.35, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35, 4.35, 5, 6, 6.35, 7, 7.35, 9.15, 10.15 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.25, 7, 10 P.M.

Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M.

Rockaway Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M. and 6.35 P.M.

Groat Neck, 6.35, 7.35, 11.35 A.M., 4.35, 5.35, 6.35 P.M.

Saturday nights, 12.15. Sundays, 9.35 A.M., 3.35 P.M.

Garden City, Queens and Hempstead, 8, 10 A.M., 1.35, 3.35, 4.35, 5.35, 6.35 P.M. From Flatbush av. daily, except Sunday, and from Hunter's Point, Monday, Wed., Fri. and Saturday, 12.15 night.

Wednesdays and Sundays only from Flatbush av. 10 P.M. Sunday, 9 A.M., 1.35, 6.35 P.M.

Glen Cove, Locust Valley, Glen Head and Roslyn, 8, 10 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Sundays, 9 A.M., 6.35 P.M.

Greenport and Sag Harbor, 8 A.M., 3.35 P.M.

Huntington and Northport, 8, 10 A.M., 4.35, 6.35 P.M.

Sundays, 9 A.M., 6.35 P.M.

Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M.

Port Jefferson, 10 A.M., 4.35 P.M. Sundays, 9 A.M.

Patchogue, 8.35 A.M., 4.35, 5.35 P.M. Sundays, 9 A.M.

Richmond Hill, Glendale, 8.35, 11 A.M., 3.35, 4.35, 5.35, 6.35 P.M. Monday, Wednesday, Friday and Saturday nights, 12.15. Sundays, 9 A.M., 6.35 P.M.

Credmoor, 8, 10 A.M., 1.35 P.M. Tuesdays, Wednesdays and Saturdays, commencing April 30.

HUNTER'S PT & WALL ST. ANNEX.—Leave Pier 17, E. R. (foot Pinest) for Hunter's Pt., 8.30, 10.30, 11.30 A.M., 3.30, 4.10, 5.10, 6.10 P.M. For further information, tickets, commutation, etc., apply at 223 B'way, cor. Barclay.

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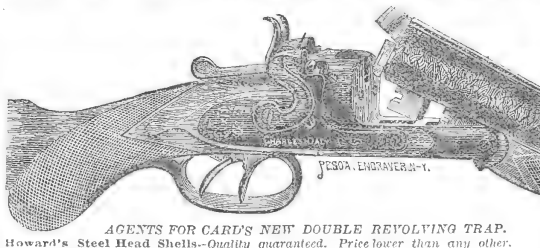
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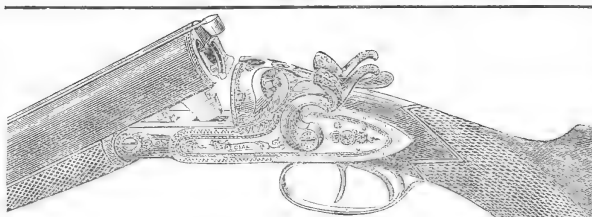


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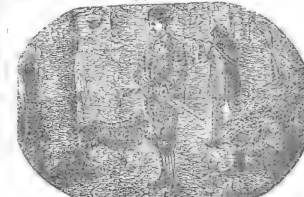
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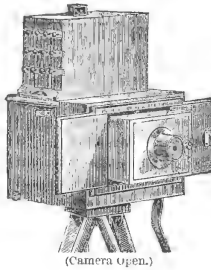
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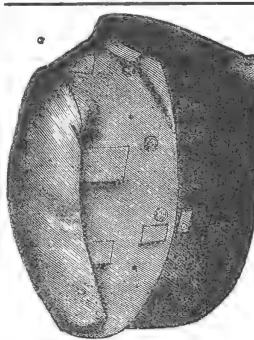
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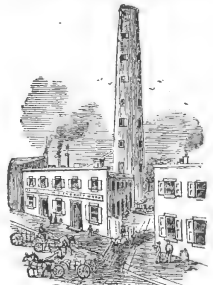
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THE ENGLISH CHALLENGE.

THE note from the chairman of the Council of the National Rifle Association of Great Britain, which we publish in another column, gives to our American managers a chance which they should not neglect. Here is an opportunity to start afresh, free from the many entangling alliances and confusions which surround our ill-starred Palma, and to wipe out that wretched Hyde affair of last summer. If properly conducted, this proposed contest could mark the beginning of a new lease of life for our moribund American Association and give American riflemen a chance to draw together and score another signal victory. We need some common object in view to invite the somewhat scattered energies of our marksmen. There is too much tendency on the part of Walnut Hill to pull away from Creedmoor, of Brinton and Stockton to 'go it alone,' and so on of all the ranges the country over. This challenge, couched in the form of an invitation, means that the British rifle-makers at last consider themselves provided with arms fit to cope with those of American manufacture, and the manufacturers of this side the ocean should be ready to show at once that the supremacy of our small arm output can yet be maintained. This challenge is the first direct communication between the older N. R. A. and its younger rival. There have been explanations, corrections, etc., before with a long string of misunderstandings which it would be tedious now to go into. Putting all this by-gone matter aside and guarding specially against any cropping up at the present time of these old time wrangles, a discreet management on both sides may now lead to a match which shall be truly representative in character. Ample time intervenes between now and the date fixed for the match for the completion of all details. We have had an experience in the past to teach us what to avoid in a dozen particulars. The manner of team selection and composition, the vexing question of the captaincy, the ways and means and the proper status of the match may all be fixed long enough in advance to make the actual work on the range and at the match very simple. We might be captious and insist that as an American team had won the Palma, and that made its conditions as an international championship emblem the British team are bound to make the match on this side the water. We say all this might be insisted upon, to the fomenting of a very pretty battle on paper and the setting back of rifle shooting in this country to a serious extent. Let the Palma remain under its present condition, but let this note from Earl Stanhope inaugurate a new match to be fought at convenient intervals between the picked teams of the two National Rifle Associations.

ANTELOPE HUNTING.—The letter which we print this week from the pen of a "Tirador," is by all odds the very best contribution to the literature of this branch of hunting that we have ever read. While we do not entirely agree with the writer on all the points he gives, we still feel that his article furnishes a great amount of most useful and practical information. In a few words he gives one of the most important directions for success in hunting the antelope. "Don't be in a hurry," he says, and the man who bears this in mind will get many more shots, and much better ones, than he who is eager to shoot at his game the moment he sees it.

In the early days of our antelope hunting we have too often crawled up to the top of a hill, fired at the first antelope that appeared in sight, and then seen the rest of the band jump almost at our feet and gallop away over the hills followed by a few wild and ineffectual shots. Take time, therefore, and locate your game well before you shoot at it. We have always used and prefer a double-barrelled field glass about the size of an opera glass rather than an extensible spy-glass, such as is recommended by "Tirador;" but this, after all, is much a matter of habit. A man uses best what he is most accustomed to.

OLIVER FISHER WINCHESTER, the founder and President of the Winchester Repeating Arms Company, died at the ripe age of seventy years at his residence at New Haven, Conn., last Friday, December 10. His career was one of small beginnings and proud achievements; his life-work well rounded and complete. An extended sketch of Mr. Winchester's life will appear in our next issue.

THE POOR CHILDREN'S CHRISTMAS.

THERE is no charity which appeals more strongly to the heart of the average man than one which helps the little ones, and no charity does better work than the one whose appeal we publish below. So much good can be done by what will appear to many of our readers a very little money that we feel sure that the Children's Aid Society's request for help will not pass altogether unheeded.

Sportsmen are proverbially kind of heart and free of hand, and we believe that at this season, when the nature of every man is a little softened and when kindly thoughts are felt and good wishes exchanged by the fraternity throughout the land, there will not be lacking men who will gladly respond to such a solicitation as the following

CHRISTMAS APPEAL FOR POOR CHILDREN:

The bitter cold and snow-storms of winter coming on so early will remind the kind-hearted of the thousands of little children in New York who are homeless and friendless, without shelter from the biting storm and frost, half-clad and barefooted, and sleeping often in boxes, cellars or attics, growing up thus for misery and crime. They reach out hands of silent appeal to the many in this country whom Providence has blessed, and ask for aid and sympathy.

Who will help the Children's Aid Society to make Christmas happier to these unfortunate little ones? The best Christmas gift is a home.

Fifty dollars will send three homeless children to homes in the country. One hundred dollars will put shoes on seventy-five barefooted little boys or girls. One hundred dollars will give 120 hungry children a hot meal for a month.

Surely those who have homes and friends and every comfort will enjoy Christmas better for feeling that they have made it happier to the homeless and friendless orphan.

C. L. BRACE.

Secretary Children's Aid Society, 19 East 4th st. N. Y. Gifts of clothing and provisions may be sent to the Central Office, 19 East Fourth Street, New York, or will be called for, if the address be forwarded.

Donations of money may be inclosed to either of the undersigned. If they are in checks or post-office orders they can be made payable to the order of George S. Coe, Treasurer. Wm. A. Booth, President, Third National Bank, 20 Nassau street; George S. Coe, Treasurer, American Exchange National Bank, 128 Broadway; C. L. Brace, Secretary, 19 East Fourth street, New York.

ERRATA.—In our last issue, eighth line of article "The Dittmars' Abracadabra," for "our compound" read "their compound." In second column, last line but one of quotation from Dittmars, for "effect" read "affect." Page 364, first column, thirteenth line from bottom, for "manufacturer" read "manufacterer"; three lines below, for "manufacteres" read "manufacterers."

These were manifest typographical blunders, comparatively trivial and unimportant beside the gross perversions of truth, of which, as we showed last week, the Dittmar Powder Manufacturing Company, No. 2, have been guilty.

A HANDLER'S PROTEST.—The communication published in another column from the handler of Nat and Smut at the recent field trials meeting speaks for itself. We have no desire or intention to go into the merits of the case, nor to comment on the results of the trials further than we have already done in the very full report published in our issue of last week.

That report was written without fear or favor and events were recorded as we saw them. From that report our readers can draw their own conclusions.

We have more than once in these columns expressed our appreciation of the difficulty of a judge's position at all dog shows, whether on the bench or in the field, and we desire now to record our thorough belief in each and every one of the gentlemen who occupied this position at Robin's Island.

There is not, nor can there be, the slightest possible doubt that each one of the judges desired most ardently to see the best dog win, and whether or not these gentlemen saw things differently from the handlers, reporters or spectators, there is no doubt that they gave the decisions which seemed to them proper. Every one who entered a dog knew, before the running, who the judges were and every one knew further that their decisions would be final, and while there can be no harm, now that it is all over, in discussing the results of the meeting, this should be done in a temperate way and with due respect for the honest convictions of others.

FOREST AND STREAM.

NEW YORK, THURSDAY, DECEMBER 16, 1880.

** The FOREST AND STREAM goes to press Wednesday. Correspondents are requested to mail their communications so that they may reach us before that day.

—This is an excellent time to call the attention of your friends to the merits of the FOREST AND STREAM. We shall be happy to supply specimen copies of the paper to any addresses which may be sent us for that purpose.

THE CENTRAL FISH CULTURAL SOCIETY.—Mr. Fred Mather, of the FOREST AND STREAM, is now in Chicago, at the second annual meeting of the Central Fish Cultural Association, a report of which will be given in our next issue.

We have on hand another batch of letters respecting the relations between farmers and sportsmen; and we regret that these are crowded out of our present number. They will be published next week.

THE following articles have been reprinted together in pamphlet form from our issues of September 23, September 30, October 7, and December 9, and will be furnished to the readers of this journal upon application:

- "The 'Dittmar Sporting Powder.'"
- "Eradicating Detonation."
- "The Detonation of 'Dittmar Sporting Powder.'"
- "The Dittmars' Abracadabra."

THERE have been numerous reports of hunting accidents this fall. The New York Sun, with its usual diligence, has collected and published at frequent intervals the accounts of dire calamities in the field. Of the men killed by shot-gun accidents the majority belong to that class who will persist in drawing their loaded guns muzzle-foremost after them through fences, into wagons and out of boats. It is extremely seldom, indeed, that an accident is reported to have occurred from any other cause than recklessness and carelessness. Common sense would seem to suggest that a loaded gun should not be pointed at the handler himself nor at his companions; but simple as it is, and easy of observance, it is a rule which is constantly forgotten, and the neglect of which is repeatedly fatal.

The absurd rules by which the meeting was governed may be credited with no small part of the dissatisfaction which has resulted, and we commend the recent letters of our correspondent "Couples" to all who are interested in field trials.

At a regular monthly meeting of the New York Association for the Protection of Fish and Game, Monday evening, Dec. 6, Mr. Whitehead offered the following:

Whereas, by chapter 591 of the laws of 1880 the Governor was authorized to appoint game constables and has failed to appoint any for the city of New York.

Resolved, That this association regrets the failure of the Governor to take such action.

Several members spoke on this question and the resolutions were adopted. Our readers will remember that from the first we have insisted that New York city and Long Island should each have one. Mr. Holberton said that it was of more importance to watch the markets than the places where game is slaughtered, for the markets are the inducement to kill unlawfully, and Mr. Luddington thought it was not only of more importance, but also more practicable, as the markets were a small territory to watch in comparison with the whole State. A resolution was adopted recommending the extension of the season for the sale of venison to Feb. 1, instead of January as the law now reads.

READERS OF THE FOREST AND STREAM, who wish to question its correspondents upon points in their communications, are requested to do so, when practicable, so that the replies may be given through the paper.

HOW THE PRESS REGARDS IT.

[From an editorial in the Richmond Whig, Dec. 6, 1890.]

"FOREST AND STREAM."

We cannot too warmly and earnestly commend this paper to the sportsmen of Virginia. It is a great paper—brave and high in every sense of the word. It has recently given striking proof of its manliness and moral courage and disinterestedness in exposing a dangerous humbug, the Dittmar powder. That fraud was a large and profitable advertiser in its columns, and by silence the paper might have continued to reap this profit, and no one could complain. But, satisfied it was a dangerous explosive, threatening life or limb of all who used it, it did not hesitate a moment to declare the truth and denounce the imposition. The paper is not only bravely and honestly conducted, but is edited with great ability. Its specialities are indispensable to the intelligent sportsman, while its miscellaneous columns supply a rich variety to the general reader. We dare say no one can peruse it a twelve-month without being duly impressed with the great importance of fish and game propagation to the people of this country. By a law simply protecting game and fish, during the breeding seasons, the whole population of the land could obtain fully half its meat-supply with little labor or cost.

There ought to be at least a thousand subscribers to FOREST AND STREAM in Virginia. Two or three thousand would be all the better for all parties. The paper is worthy of the philanthropic cause it supports. Let the Game clubs all over the State direct their energies to the increased circulation of this paper. They could not adopt a more effective means of promoting the objects all desire—streams filled with fish, and field and forest with game.

The Sportsman Tourist.

HINTS ON ANTELOPE SHOOTING.

THE antelope, to a beginner, is, with the exception of the mountain sheep, the most difficult animal of approach on this continent. When first I hunted antelope on the Upper Yellowstone I came to the conclusion that there was not much fun in it, as it seemed to be more a matter of luck than skill if I got within 600 yards of one, and although I am considered a pretty good shot, I must confess that half that distance is my limit for anything like a sure thing, and even then I don't want too much wind, nor do I want to be out of wind from having run up and down a few ravines to get a shot.

The fact is there is no animal possessed of keener sight than an antelope, unless it be a giraffe. In localities where they have never been shot at much they are comparatively tame, and may appear stupid; but just try them where Indians are in the habit of hunting and then the true character, especially as an Indian always hunts on horseback, and when he rounds one the next thing he does is to run him down, if he can, and that scares all the others that are in sight away. During the summers and falls of 1878 and 1879 I did nothing but hunt, and antelope received the greater part of my attention, and having killed over 240 by actual count I think that at any rate I gained some valuable experience, some of which I will try to impart. The principal thing is to keep out of sight. Don't delude yourself because a hind is a couple of miles away, apparently feeding, and all with their heads down, that none are on the look out, and that you may ride up a little closer and then keep out of sight. That won't do; I know it to my sorrow. The chances are ten to one that they will see you long before you see them, and although they may not move at first, still they are on the *qui vive*, and if you get a close shot after having shown yourself, why, just see it down as luck.

My advice is to always hunt over broken ground and undulating prairie, for although you don't see as many antelope there as on level ground, still your chances are twenty to one in your favor, as against the level when you do come across a band. Again, remember that when you reach the summit of a hill your horse's head is in plain sight before you can look in the hollow beyond, so if you are too lazy to dismount always skirt along the ridge for a few yards, stand well up in your stirrups and take a good look. But this is the lazy and unprofitable style, and generally before you can check your horse the antelope have seen you, and that settles it. So the best way is to dismount, lead your horse with a good long lariat, so he will be some yards behind you; take off your hat (which, by the way, is also visible before you can see—your eyes being lower than the crown) and go slowly up until you can just see well into the ravines and, on the

hill sides beyond. Don't be in a hurry. Take a cautious survey, as during the day it often happens that an old buck is lying down sunning himself on some gentle slope, when he may easily be mistaken for a stone, or perhaps a whole band may be feeding or wandering through these ravines right under your nose or deep down where the grass is freshest. This is more likely to be the case in the fall months, when the prairie grass is short and high ground has been long sun-dried and cured, in which case antelope, and in fact all herbivorous animals, prefer the short grass, which is more tender in low, damp ground.

If you have the good luck to see one or more, walk back to your horse. Don't pull him up where you are. Take off your pocket pin, drive it in firmly with your heel, and be sure it is straight, as then it will hold better. Fasten your horse securely and commence your stalking. After the horse is well off your hands then you are all right, but be sure before you leave him that he can't get away, as when you come back you may find your mount has disappeared and then, as frequently happens, you may be fifteen miles from camp, which is quite a long walk, besides losing your saddle and accoutrements; for although the horse may turn up, you will generally hear from the party who has found him that he was stripped. Whether he was or not that is generally the story, so it is well to have the horse both tied and hobbed.

Now go steadily, keep the wind well in your face, and if necessary do the very best crawling you can. Get as close as possible, and don't shoot if you can't get within 300 yards. Never mind what you have done at a target or what you see in print about long shots and all that. I have seen dozens of as fine rifle shots as ever drew a rifle up to their shoulder, and I declare that I never saw a man who could count on an antelope over 300 yards. Remember it is fully equal to a "five point" in a nine inch wing. Besides, if you miss this shot you may scare away more game than you have seen for a week, so be steady.

After crawling about and dragging yourself snake fashion, it is well to take a good rest before firing, for although you may think yourself steady and cool and in good wind it may only be over anxiety, so just hold on a few moments; scan the ground deliberately; calculate your distances; make allowances, such as your gun forward, and if it stands shorter place another cartridge in your mouth, bullet end in; take good, steady aim, and blaze away. Reload your gun instantly, whether the game is down or not. Another may jump up that you had not seen. Better to be always ready and accustom yourself to do all the waiting, for an antelope has not much patience, and if only hit through the paunch, leg, haunch, or in fact anywhere but in a vital spot, he can still outrun any ordinary horse, even on these level prairie. I have seen some make it quite interesting for a cavalry horse on two long leeds and a stump. Again, if only wounded, although fatally, he will be sure to go as far as he can, and then all your work will only result in providing a square meal for wolves or coyotes and no saddles to show for it. So repeat, get as close as possible and make as near a "dead center" as you know how; and with all these precautions many a one will get away without a scratch. Just beat him on the shoulder and he will lay down. When on the run shoot well ahead and low, as a bullet that passes over an animal is lost, whereas one that goes low, even if too low, stands a chance of breaking a leg; besides, the falling is and always has been to overshoot, especially when taking quick shots; reason, taking too full a front sight.

My favorite rifle for antelope shooting is a specialty is a Sharps, cal. .35, chambered for 100 grain powder and 500 grains lead, solid bullet. I want a round and gun, pistol and grip, three inch barrel, open sights, but line black four sight preferred. I always use an explosive bullet, and with these generally manage to stop an antelope on pretty short notice. Solid bullets do very well for target, but are miserable things on game, especially the cylinder, conical, sharp-pointed style. They go clear through anything, but are so sharp and awl-like that they produce no shock (see article on bullets in issue of Nov. 18, 1889).

I prefer the rifle, it is the best, single shooter made, both in action and every other particular; they never get out of order, are easily cleaned, and as for their accuracy, why that is proverbial. As for globe and peep sights and all such fixings I never use them, they cannot be carried attached to a rifle which is knocked about and slung on the pommel of a saddle; besides, up to 300 yards open sights, if properly constructed, will do all that is required. The great point is to get a shot that shoots a heavy load of power the moment you get the better so long as it is not to nick your head off; and you must have the same train of eye, as in that case you will never hit anything. The flatter trajectory the gun has the better, as it is very difficult to sight a rifle accurately on short notice, especially when shooting across ravines and broken ground.

As for clothes, nothing equals Holabird's grass-colored canvas suits; they are the very best things made for many obvious reasons; they wear well, are light and easily carried, waterproof to a certain extent, durable, cheap, and have many pockets and conveniences. Buckskin, although it looks very "frontierish" and imparts a certain air of ruffianism and brigandage to the wearer, is far inferior in every other respect, as in wet weather it is absolutely worthless; in hot, too warm; and in cold, not warm unless many fannel or woollen garments are worn under, in which case canvas will do about as well, so that practically canvas clothes, for either prairie or timber, best or fowl are to be preferred. The shoes or boots are very important. For my part I prefer Thompson & Son's moccasins, with moderately heavy soles, hob nails on the heels. Let the soles project half an inch beyond the foot all around, then when you strike a cactus bed you can go ahead, whereas, if the sole is only broad at the toes, the under part of your foot, under the instep I mean, will be full of thorns, and that is not pleasant. Wear canvas leggings they are cool and easy on the legs, and above all light. I have worn Thompson's boot-shoes, but don't like them, they are too heavy, although excellent for a hunter. A hat to match the coat, and a pair of mittens and broad brim.

Carry your cartridges in a canvas belt round the waist. Never use a leather belt, the cartridges in leather become covered with verdigris and dirt and foul up the breach of the rifle, whereas the friction on the canvas keeps them clean and bright, besides being lighter and better in every way. Always carry a shell extractor in your belt, the one that will never leave it at home. I mean a shell extractor for a headless shell, as no amount of pulling and hauling will budge one of them sometimes. I also greatly believe in having a ramrod somewhere about my clothes. The stock of the rifle, however, is the most convenient place and a pointed rod is the best, same as Winchester rifles are provided with.

I always carry a hunting knife and steel, both fitting in one sheath. This saves trouble, and however good a knife may be it soon gets dull, especially when carving up buffalo. The blade of the knife should be all one piece with the handle, be

with buck horn grip. No other kind of knife will stand chopping with, and that is sometimes unavoidable. A small light steel is all that is required.

I prefer the California saddle to any other, but a good McClellan is perhaps the best for both man and horse. Always carry saddle bags, they are convenient for your lunch, some extra ammunition, matches, and a flask of cold tea, which is the best and most refreshing drink I know of. It is as well to carry in them an oily rag, and if it comes on to rain just rub your gun with it, and when you get to camp you will see how easily it is cleaned.

My favorite lariat is made of plaited cord—not twisted, for this when wet unravels—about the same as good strong window cord, forty-five feet long. I fasten one end to the bit, hold it up as I would a halter strap, and allow the other end to drag a trawl after me. When I see game close I jump off my horse, stand or sit upon the rope, and thus secure my horse at a moment's notice. When I have time I use a pocket pin. This should be made of steel and formed like the old-fashioned bayonet, not round, as in hard ground it is very difficult to drive the latter, whereas a three-cornered one cuts its way and is soon home. Have a swivel attachment on top, that prevents the lariat from becoming twisted or snarled. Keep the pin fastened by a steel snap, on the mounting side; this is the most convenient and secure mode of carrying it, and the quickest to get it off.

A field glass is a good contrivance. A single barrel will answer all purposes, is cheaper, lighter and will stand many more hard knocks than the opera glass style or lorgnette. This can be carried in the belt in a leather case on left side (carry knife on right), and should not be over six inches long when closed.

A compass is a grand, good thing if you understand it, and know where you want to go, but unless you do it doesn't amount to much, for it is always a greater aggravation to be lost with a compass than without one. I always carry one; one that opens like a double-case hunting watch is the best; and sometimes have been lost, compass and all. There is nothing more easily leading to this than to follow a wounded animal; you forget everything but the game you pursue, and when it is getting late and thoughts of camp steal gently over you, then you find you have lost everything but your appetite. For this emergency I always carry salt and matches in my saddle bags; and if I have some meat I can at least have some supper, and a smoke, which goes better than fasting till I strike camp, whenever that may be.

I have killed as many as eight antelope in one day, and could frequently have killed more, but I never shot at game that I could not utilize, as that I consider the most unsportsmanlike thing a man can do. I have heard of men killing as high as sixty in one day, and I dare say it is done occasionally by men who hunt for pelts on the Missouri and Upper Yellowstone. I have seen bands of over 300 and sometimes five or six bands in one day.

My experience goes to prove that an antelope can carry as much lead as any animal of its weight I know of; therefore, use straight powder, and lots of it, at least sixty grains; and, above all, get close and use nothing but hollow pointed or explosive bullets, never smaller than .45, weighing 300 grains. One word more about clothes. For keeping out the cold in winter I know of nothing that comes up to the dog skin leather shooting jacket, sold by Wm. Reed & Sons, of Boston. They are in every particular the best garment made for use in cold weather, and cannot be too highly recommended, but for summer and fall work the canvas will do well enough.

Newport Barricks, Ky.

THRAUDR.

THE JAMESTOWN'S THANKSGIVING PROCLAMATION.

BY THE LIEUTENANT-GOVERNOR.

DESERVED by State, thrown over by Church, By all of our countrymen left in the lurch; Banished far to the North for no sins of our own, Our prospects uncertain, our hopes overthrown, With the days all too short, the nights long and drear, Praying but to depart, for it's hard to stay here. While feasting and thanking go on through the nation, The day comes to us, but with no proclamation. We therefore resolve, while patters the rain down, That a crying injustice is done to the Jamestowns, And to give our complaints a firmer foundation, We send to the world this, our first proclamation: For the crop of the season we thank as we oughter; Our tanks are well filled with delicious rain water; The loss of the heavens to us is a gain.

Our larders are stored with the sports of the chase, And venison grease oozes out from each face, And horns, tail and hoofs may shortly appear, So we gratefully offer for plenty of deer. The shores and the mud flats their treasures have poured, And with various sea dainties our lockers are stored. On mussels and scallops we dine without qualms, And we gratefully offer for elegant clams. We have ten, snipe and plover and Canada geese, And plenty of mallards at two bits a piece. We've a cook that can dish up crow, raven or owl, So we offer our thanks for the stock of wild fowl. The deep seas send us codfish and halibut, too; The latter so large that one feeds the whole crew. We have sea bass and salmon as much as we wish, And we offer our thanks for abundance of fish. We are thankful for mountains and rivers and trees, For lively southeasterns with grating breeze; For rain-storms and hail-storms and plenty of snow, And occasional earthquakes which follow the blow; For volcanoes and glaciers and scenery grand, And for long nights of darkness which hide the wet land; And for hops at the Castle and the girls we there meet, The fairest in Sitka, and to us it is sweet To learn to talk Russian, and say, "Yah hoblu," "Poslodila menia," and—well, that will do. For our clothing, worn out to the ultimate thread; For our gold lace all tarnished and skins hard and red, For the gloomy days ended, for bright ones to come, When the steamer shall bring in the word to go home. Then we'll have our thanksgiving and our thanks, too, sincere, And with joy we will shout, for its tough to stay here.

Sticks, 1879, 1890, 1891, 1892, 1893.

* I love. † Give me a kiss.

Natural History.

OUR WATERFOWL.

FULIGULINÆ.

THE Sea Ducks present many differences in structure from their fresh water cousins and constitute a subfamily of the *Anatide*. One of the most obvious distinctions is the constant presence in this group of a lobe or flap of skin depending from the hind toe which is never seen in the *Anatide*, so that the two groups may always be distinguished by an inspection of the feet. In habits the two subfamilies differ widely, although there are not wanting species of each which approach in their mode of life, that of the other. The Sea Ducks, as their name implies, are maritime in their distribution, though by no means exclusively so, yet many of them retire to fresh water lakes or streams for the purpose of breeding. There are others like the Eider duck for instance, that even during the breeding season remain on the salt water, and are only found occasionally during the migrations on our rivers and lakes. All the *Fuligulina* dive for their food, and thus are enabled to feed in deep water where the *Anatide*, which have not this habit could not get a living. Those species which confine themselves to the sea feed almost exclusively on shellfish and are, therefore, very little esteemed for food, the flesh being rank and fishy. On the other hand, species which pass a considerable portion of the year on our inland waters are excellent eating, and some of them are the most sought after of all our ducks. Such are the Canvasback, the Redhead, the Broadbill and others. The legs in this group are placed farther behind than in the *Anatide*, and its members are thus less at home on dry land than are the fresh water ducks, while, on the other hand, the power of swimming and diving is increased. It is from the *Fuligulina* that much of the eider down of commerce is taken. The eider duck of course furnishes a portion of this, but other genera such as *Harelda* and *Ademia* supply a down which, for all practical purposes, is just about as valuable. The genus *Fuligula*, which is sometimes farther divided into the subgenera *Fuliza* and *Aythya*, contains some of the most important of our Sea Ducks.

Fuligula marila. Greater Scaup Duck, Big Blackhead, Broadbill, Bluebill, Raft Duck, Plooming Powl.

Male, head neck and fore part of body black, the former with green and purple reflections; below white; sides and fore back darker, waved with black; speculum, white; lower back, tail and wing tips dull black; bill blue, feet darker. The female has the face white, and the black of the male generally replaced by brownish. Length about twenty inches.

The broadbill, or blackhead, is an abundant species found almost everywhere throughout the country. It is extremely abundant during the late fall, winter and early spring along the Atlantic coast, and is everywhere sought after. In the interior it is plenty from the last of September up to the advent of cold weather, and under the name of scaup or blue bill is known to all Western gunners. We have found it very numerous between the Missouri River and the Rocky Mountains, and equally so during the winter in California. The flesh of this species is excellent.

On the Atlantic Coast broadbills are killed principally from batteries, or when flying across points, though in winter they are sometimes sculled up to during the night, when the discharge of two barrels into the thick flock will sometimes kill and cripple forty or fifty birds. They come well to decoys and furnish excellent sport.

Fuligula affinis. Lesser Scaup Duck, Little Blackhead, River Broadbill.

Exactly similar in coloration to the foregoing, but smaller. Length about sixteen inches.

This species, long a doubtful one, and by many authors considered identical with *F. marila*, seems to be a perfectly distinct form. We have never found any difficulty in distinguishing the two when in the flesh, though it must be acknowledged that size is the principal if not the only character which separates them. Dr. Coues says: "There appears to be something different in their range, the *F. affinis* being the more Southerly. Not that it does not in the breeding season reach as high latitudes as the other, but that its autumnal movement is pushed to the West Indies and Central America, where the true *F. marila* is not recorded as occurring."

The little Broadbill is not uncommon on the Atlantic Coast, but appears to be most abundant in the interior. We have seen them in great numbers on the Upper Missouri, and have found them breeding in Alkaline lakes in the mountains of Wyoming. They are shot by the same methods as broadbills.

Fuligula collaris. Ring-necked duck; Titled Duck. Male, head puffy, head, neck, except a chestnut ring around it; breast, back wings and tail, black; chin and under parts, white; speculum, gray; waved with black. Bill black, with a spring plumage, a white ring near tip, feet bluish. Female, head and brownish; face, throat and ring about the eye whitish. Length about eighteen inches.

The titled duck is not very abundant along the Atlantic coast, although every year a few are killed. They associate freely with the broadbills, from which, however, the males may be distinguished a gun shot away by the puffy crest which they erect when suspicious and just before taking

wing. On our Western waters they appear to be much more abundant. Many breed in the marshes of Illinois, though, no doubt, by far the greater number proceed the high latitudes for the purpose of reproduction.

Fuligula ferina americana. Red Head, Pochard. Male with head puffy; head and upper neck rich chestnut, lower neck, breast and upper tail coverts black, belly white, speculum gray; back and sides gray, thickly waved with black; iris yellow; bill rather short and wide like that of the broadbill, crossed by a black band near the tip; feet as in the preceding. The female has the black and chestnut of the male replaced by dark brown, and the waving on back and sides less distinct. Length about twenty inches.

The red head of North America differs from the European bird so slightly that it is classed by ornithologists as merely a variety of that species. Its range includes almost the whole of the United States, and it is especially abundant along the Atlantic seaboard and in the Western States. West of the Mississippi it appears to be less abundant, although we have taken it during the migrations in the Rocky Mountains and in California. There seems to be no record of this species breeding within our borders.

The flesh of the redhead fully equals in excellence that of the canvas back when the two species have fed on the same grounds, and we fail to see any reason for the very strong bias in favor of the last named bird. We would defy the most accomplished gourmand to tell one from the other when they appear on the table. The red head is shot by the same methods employed to bring to bag the black head.

Fuligula collaris. Canvas-back Duck. Male, head and neck dark chestnut, the former washed on chin and about the base of the bill with blackish brown, neck and breast black; otherwise as in *Fuligula ferina americana*, except that the black washings on back and sides are much narrower and fainter, so that the general cast of the plumage is very pale—nearly white, in fact; iris red, bill longer than head and narrow, the nostrils in the middle, black. Feet dark. Female colored much as in the preceding species, but always to be known by the bill and head.

A question very frequently asked is, What is the difference between a red head and a canvas back? but we feel sure that no one who has ever had the distinguishing characters of the two once pointed out to him would ever have any trouble in separating them. Setting aside the differences of color, which in the males mark the two species unmistakably, the shape of the head and bill are so unlike as to be perfectly characteristic. The head and bill of the red head resemble very closely in shape that of the ring-necked duck. The outline from the tip of the bill to the crown of the head is quite deeply concave. The bill itself is shorter than the head and is comparatively wide. The profile of the canvas back on the other hand is but very slightly concave; the bill is very narrow and decidedly longer than the head, and has the nostrils in the middle instead of, as in the red head, in the basal half. The color of the eye is another distinguishing character, as is that of the back.

The canvas back is well known throughout the eastern half of North America, but is less abundant west of the Missouri River. It has been found, however, breeding at Turtle Mountains and in the Rockies by Dr. Coues and others. It is abundant in California in winter, where it associates more or less freely with mallard, broadbills and red heads. It is perhaps held in more esteem as a food bird on the Atlantic coast than anywhere else in the country.

[TO BE CONTINUED.]

THE SENSES OF BIRDS.

EVER since reading an account of the experiments of the veteran Audubon regarding the senses that guide the vulture to its food I had taken it for granted that sight was the sole sense used by this or other flesh-eating birds; and my own observations had strengthened me in the belief. An incident that occurred a few days since, however, has convinced me that one bird at least has a set of olfactory even more delicately fashioned than his optics, though his eye is little less than a telescope in power. A horse belonging to a neighbor died one night last week, and the following morning the body was dragged to some distance and left uninterred. About noon of the same day I noticed a company of perhaps twenty crows, flying low, heading directly for the carcass. Arrived at the spot where the object of their search lay, they circled about a few times in the air, and then, oblivious to the fact that all over the land distant relatives of theirs were being served at Thanksgiving dinners, they gathered round the carcass and banqueted right royally.

This morning I visited the scene of the feast. The birds had, I found, torn a hole through the hide of the abdomen and devoured a portion of the viscera. I was surprised to see that the carcass lay in a shallow creek bed, from which the land rose gradually, but to a considerable height, in the direction from which the crows had been seen to come. The nearest woods, and the ones from which the crows undoubtedly came, are four miles away, and it immediately occurred to me that at such a distance the bird or birds must have been at a vast height if sight discovered the carcass to them. With the aid of a stick and a ruler I made a rough calculation, and satisfied myself that even at a distance of only two miles the body of the horse could not be seen at much less than 1,000 feet above the earth's surface. Of course, crows feed at such a height. I once saw one pursue a hawk directly upward till both birds were almost lost to view; but this was during the breeding season, and every one knows that ordinarily this bird is content with much less lofty flights. Such being the case, one can hardly doubt that the birds were guided entirely by the sense of smell; but how marvellously delicate must be the organs that could detect at such a distance, even with a favorable wind, so slight a taint as would arise from an animal not in the least decayed!

A few weeks ago, while in Southwestern Minnesota, I recalled noticing an instance of this same bird's acuteness of perception, which was probably no less remarkable than that just narrated. On the open prairie, many miles from any timber, a crow was seen by the body of a grouse which lay upon the snow. As usual he had commenced his meal by picking out the eyes of the "chicken." Crows were by no means abundant (at this season, at any rate) in the vicinity where this individual was seen; in fact, I saw only one other while in the State. It would be useless to attempt to surmise how far this bird may have seen or scented the frozen grouse. The latter doubtless perished during the recent unprecedented October storm, as did quail, coots and, I am told, even ducks.

If the senses of the crow are wonderfully acute, those of the hawk are no less so. It is to be questioned whither some of these, as the harriers, may not be aided in finding their prey by the sense of smell, and I am inclined to think that the ear guides them to many a fine meal. Who that has hunted waterfowl has not, after firing into a flock of ducks, seen a hawk hurrying toward the spot, evidently attracted by the report, and intent on securing a bird at the expense of the sportsman? A popular notion attributes to the larger game birds a sense of smell so delicate as to warn them of the approach of man or any other enemy at a distance, provided they have the wind in their favor. I am inclined to think that this opinion is not well founded, but certainly no birds are possessed of better eyes and ears than the geese and cranes. The superior height of the latter gives them a wide range of vision, and they are, perhaps, the most unapproachable of all our birds. Every one who has paid any attention to the subject must have noticed that the shyness of birds is somewhat in proportion to their size. This is largely, no doubt, the result of experience or of inherited "instinct," those birds that have been long persecuted by man having learned to fear his presence, but partly I think, more especially in the case of the very smallest species, to defective vision. I have known small birds to be killed by flying against buildings, which of course they must have seen, but not until it was too late to alter their course. And I have seen a kinglet taken with the hand, to the great surprise and fright of the bird itself. I would by no means be understood as saying that any bird cannot distinguish a house or a man as such, at a considerable or even a great distance; the fact that they sometimes fail to do so is doubtless owing to a too close attention to business (insect catching) and to a lack of observation. The eye of the small bird is as well adapted to the work it has to perform as is that of the larger one; but it may be called "near-sighted"—it is not a telescope, but a microscope, and as such it is all that its possessor could desire. Observe a small flycatcher seated on a dead limb in the shady woods, or a warbler or kinglet darting about among the branches of an oak or elm; then see him dart here and there, pursuing in zig-zag course, and with marvellous rapidity, insects so small that we can scarcely detect their presence, and we cannot but observe that its eye is wonderfully acute. Contrast this tiny bead with the long-ranged optics of the former, and I think I have adapted everything to the place which it is destined to occupy.

H. S. W.
"Homo" has some interesting notes on this subject in his letter published elsewhere.

HABITS OF SNAKES.—TUNTON, Mass., Oct.—As I was walking along the brook about 150 yards below my fish pond, I saw a pair of water snakes fastened together. The female was two and one-half feet long and the male about two. The former, being the stronger of the two, dragged the male up stream, tail foremost at a lively rate. I killed them and pulled them apart, but was obliged to exert considerable force—at least ten pounds—to do it. Now it will be nine months before snakes lay their eggs. Will some naturalist explain?
C. B.

Fish Culture.

STRIPED BASS WANTED.

WE are permitted to publish the following letter from one of the California Fish Commission to Professor Baird. The fish wanted are the striped bass or rockfish, *Roccus tinectus*, the fish not to exceed six inches in length. Will those of our readers who know where they can be obtained in quantity please communicate the facts to Prof. Baird, as he requests:

HON. SPOONER F. BAIRD, U. S. Commissioner Fish and Fisheries.

SMITHSONIAN INSTITUTION, Washington, D. C.
Dear Sir—I have from unavoidable causes been compelled until now to defer addressing you upon the subject of transporting to and acclimating in our waters the "striped bass" of your coast.

I have long had the impression that the great Bay of San Francisco together with the bays of "San Pablo" and "Suisun" connecting with it and the number of creeks running into them, affording a variety of qualities and conditions regarding temperature and saline properties together with feeding material, would be well adapted to the propagation and growth of the "striped bass."

Having this in view I last year opened a correspondence with Mr. Livingston Stone upon the subject of attempting the transfer of some small fish at the time of the bringing on of the lobsters. Many difficulties presented themselves in the matter of obtaining the small fry of the striped bass, which resulted in my suggesting to Mr. Stone the probability of obtaining in the extreme lower waters of the "Navasine" or Shrewsbury River in New Jersey. Mr. Stone succeeded in obtaining a small number at the place designed by me, and with his usual skill, brought them safely to this coast and deposited them at the head of the Straits of Carquinez, the turning point of the fresh and salt water.

Some six or seven months after the time of placing in the water I heard that one of eight inches in length had been taken by Mr. Monterey, which is about one hundred miles south of this and is in correspondence with the Pacific Ocean. All of the circumstances were of so doubtful a character that I gave the rumor but little attention, until about the first of July, eleven months after the planting of the young fry—at the time about one and a half inches in length—in the Straits of Carquinez, there was brought to me a very handsome striped bass taken in this harbor, measuring twelve and one-half inches in length and weighing one pound. The fish was in the highest condition; the milt full and ripe,

and the flavor fully up to the best specimens of the fish at the East. The exceedingly rapid growth, indicating the adaptability of the waters of this bay to the salmon, together with the immense amount of shrimps which abound in this bay as furnishing abundant food, I must acknowledge, infused me with almost an enthusiasm to have this valuable fish brought here in sufficient numbers to insure the breeding of them. I have heard of some experiments having been made in breeding them artificially. If that can be done we might, of course, bring them out as easily and in as great numbers as we now do, and my object in now writing you is to ascertain the probability of such an effort being successful.

If it cannot be done our only course must be to enlarge upon and extend the experiment of last year. The small fry can be obtained in the fresh-water heads of the Navesink, the Raritan, the Passaic, the Hackensack and in fact all of those small rivers which flow from the New Jersey coast into the Atlantic and the bays emptying into it. Will you be so kind as to give the matter some thought and let us have the benefit of it? The sand are a success, and we feel satisfied that so soon as they shall have reached such numbers as to insure contact we shall breed them in abundance.

With much respect I remain, yours truly,

S. R. THROCKMORTON.
Chairman California Fish Commission.

SOME SINGULAR SALMON.

DOMINION OF CANADA,
PISCICULTURAL ESTABLISHMENT,
NEWCASTLE, OCT. 30.

DEAR SIR—I desire to acknowledge, with many thanks, the receipt of some fifty thousand California salmon eggs. They arrived here in first-class condition and are now all hatched out. I also notice with much pleasure the arrival at New York and shipment to Europe of a very large lot of these ova, all of which were reported to be in very fine condition. This success in your efforts in connection with fish culture, while it must be very gratifying to yourself, is likewise pleasing to myself, and no doubt to all others engaged in the industry of artificial fish culture.

I have to record a most peculiar circumstance in relation to our Ontario salmon. I speak more particularly of those which have come into my stream here. The same falling off in numbers is felt here as has been the case in all the rivers and streams on the Atlantic coast. My reports received from the several officers in charge show a wonderful falling off. At the Saguenay, where formerly our requisite supply of some 300 parent salmon were easily obtained in a few weeks in June and July, only some twenty-five could be captured during the whole season. On the Redoubt, the most famous salmon river we have, only some 600,000 salmon could be gathered, whereas in former years no difficulty was experienced in getting one and a half to two millions. At the Miramichi and Halifax nurseries the result is not yet known; no reports have as yet come in, but I fear a similar falling off will take place there as well. In connection with the reduced numbers of salmon at this hatchery, strange to say, only three males have yet been found in the stream; all those have yet been captured or have entered the river before they were fully matured. We have enough of these on hand at present to give us 350,000 eggs, but we have not, nor can we find in the whole stream, a single male fish to impregnate these eggs with, should we strip them. What we shall do puzzles me very much; add to this the fact that the season is about over for fish to enter the stream. To-day I went down the creek with one of my men and caught some eighteen magnificent female fish on the beds in the open stream, in broad daylight, and could not find a male. This has been the case since the first entrance of the salmon this fall. There are any amount of beds; in fact, on many of the gravel beds the bottom of the creek is literally plowed up with the workings of these salmon. Another peculiarity is that not a single grisee has been seen, with the exception of one California grisee taken last night. In the fall of 1878 salmon of both sexes and grisee were very numerous—quite equal to the olden times, some of the fish were of record. In 1879 they fell off very much in numbers, and this season they are very much reduced from last year, with the peculiarity of all being large females and no grisee. I mention these circumstances for your information, and they will no doubt appear to you as being very extraordinary. I can hardly venture to ask you for a cause, or even the theory of a cause, for this peculiarity with my fish. My only hopes are that when Professor Hind hears of it, with his love in relation to salmon (particularly the herring and salmon spawning ova), will no doubt incubate some theory why and how these phenomena have occurred.

I am also getting puzzled in mind about your California salmon; they are also turning a cold shoulder to me. The record, this season of 1880, is as follows: In April last my son caught a very beautifully formed one in the stream here while fishing for some suckers. It was about three pounds in weight; I have him yet. He has been kept in a small tank of spring water along with some trout, but we have never seen him eat anything yet; he is looking a little thin just now. One small trap net was set out in the lake this season nearly opposite my stream, and during my absence the fishermen reported that about a half a dozen California salmon were taken, from four to six pounds. About ten days ago a female California salmon was caught in this creek (spent), length twenty-eight inches—she was terribly battered up, and last night I caught a small grisee; the two fish have been kept in a small tank of spring water. Judging from what I have specimens of the *quinnat* (having never seen a full sized adult) these two last mentioned specimens cannot belong to that class. I should say they must be more like the *Salmo soureiri*, hooked nosed salmon, or *Salmo enis*, dog-salmon, as each of them have three sharp hooked-like teeth at the extreme end of both the upper and lower jaws. I have never seen fish with teeth so strangely shaped nor so peculiarly placed in their mouths as these two fish have.

I am fearful that unless they have become tiresome to you with this long letter, but before closing it, might I ask as you with whether it would be possible for me to obtain from you a few carp. I have some ponds which were originally made for nursery-ponds for young salmon, but finding that the temperature of the water rises so high in them in the summer, the *salmonoid* family all die. I have thought of using them for carp. The water to any extent can be supplied from the main creek, the ponds cover some three acres or more, ranging from two to four feet deep. Should I succeed in getting a few carp, I would sink wells some eight or ten feet deep in them in which the carp could sleep during the extreme cold in winter. The water gets pretty warm in them in summer,

and a good deal of vegetable matter is produced in them, which I think would be well adapted for the growth of these fish. I have raised the goldfish, or golden carp, in one of them somewhat successfully. Being desirous of trying the German carp I shall feel greatly indebted to you if I could get a few pairs through your kind instrumentality. Again apologizing for this long letter, I am yours, very obediently,

SAMUEL WILMOT.

Professor S. P. BAIRD.

U. S. Commissioner, Fish and Fisheries.
P. S.—If you would like a specimen of our Ontario salmon in the gravel state I shall be greatly pleased to forward one or more to you. I can only promise you two females, from the causes mentioned herein. Should you also like to have one of the lacinated, emaciated specimens of "Canadian Californias," I will send it also. S. W.

In connection with the foregoing letter, which we have been kindly permitted to publish, we think it proper to state that while at Berlin, attending the International Exhibition, we met Mr. Philippe Gancleux, *Ingénieur en Chef du Dept. de l'Hydrog.*, who practices fish culture at Epinal, France, who said that his experience had proved that dry impregnation produces an excess of females, while wet, or those of water, always brought a preponderance of males. We have no opinion to express on this point, and commend it to the consideration of Mr. Wilmot and other fish breeders.

THE PENNSYLVANIA COMMISSION.—We learn that the forthcoming report of the Fish Commission of Pennsylvania will be the first ever published in the State. It is pleasant to note the progress made not only in fish culture but also in ichthyological lore, which has been taken up by the fish culturist as a necessary adjunct to his profession. The new report will contain a description of Pennsylvania fishes by Prof. E. D. Cope, with forty illustrations. The culture of black bass has been so successful that Commissioner Bevis is of the opinion that enough have been caught this season alone to exceed all the amount of all moneys appropriated by the State for fish culture, even if the fish were sold at five cents per pound. They have been introduced into many streams whose united length is estimated at 1,500 miles. Commissioner Reeder was unable to attend the last meeting by reason of having received a painful stroke from the limb of a tree while hunting.

SHAD HATCHING AND CAMP—Aqualude Ponds, Wrentham, N. J., Dec. 4.—Having been absent from home a longer portion of the time for more than two months past, and when at home either overwhelmed with correspondence or sick, I have not had an opportunity to even take the wrappers of many of my newspapers, and a huge pile has accumulated. To-day I have been reading up eight different numbers of FOREST AND STREAM, as that is a paper which I go through page by page, advertisement and all. In the issue for October 7 I notice the communication of Mr. Livingston Stone confirming the statement of Mr. Seth Green in reply to a previous article of mine concerning the first hatching of shad at Holyoke. Mr. Stone doubtless says, soon after the last date, my reply to Mr. Green's inquiry, asking how I obtained my information. Although this comes late, I improve the first opportunity to announce my faith in the statements of Messrs. Green and Stone. Referring to Mr. Green's experience I am sympathetic with him, for in my own persistent labor of love in connection with fish-culture I have encountered the same hoarse opposition, ridicule and malignant cussedness in the way of pecuniary damage to my property, and this by comparatively intelligent individuals. I have for a month or more past been very busy distributing the Government carp in Southern New Jersey and Eastern Pennsylvania. Quite a number of parties have engaged to lay out a comprehensive system of carp ponds and are making arrangements to engage extensively in the new industry. Before many years the farmers of this region will think as much of their carp as they now do of their chickens or pigs, and well they may, for there is more money to be made in carp-culture than in either chickens, pigs or other live stock.

MILTON P. PEROE.

HATCHING EGGS—Bildeford, Me., Dec. 3.—In your issue of Nov. 25 I notice that Prof. Baird is ready to distribute salmon eggs from Bucksport. If I knew the *modus operandi* of treating these eggs I would like to avail myself of the opportunity to place some in the Sago River this season. There is little doubt but that we shall have a fishway constructed at the falls here the coming summer. Can you give me through your valuable journal some instructions in the above matter, and say where they should be placed in the river, whether above or below the falls.

FREDERICK HAINES.

The eggs should be placed in hatching troughs, and kept from enemies until they hatch, say from ten to fifty days, according to their development and the temperature. They should then be kept thirty to fifty days longer until the umbilicus is absorbed and they begin to take food. If you have no troughs or experience you had better apply to the Fish Commissioners of your State, Mr. E. M. Stillwell, Bangor and Mr. Everett Smith, Portland, or to Mr. Chas. G. Atkins, Assistant U. S. Fish Commissioner, Bucksport, who may hatch them for you.

PROTECT SPAWNING LOBSTERS—New Bedford, Mass.—Your article on lobsters in a late issue induces me to give some hints on the subject, which to me seem more to the point than the catching of the male lobster. I have seen all other for the quantity of lobsters is the catching of females during the spawning season. I have often when looking at a female lobster loaded with eggs wondered how many they would count. Whoever has counted the number of shot (No. 8, for instance) in a common charge can form some estimate of the number of eggs in a lobster of three pounds or more during the spawning season—tens and tens of thousands. It seems as though all the spawn carrying lobsters and their way into the pots—it may be to hide from their enemies. I have seen brought in by one boat trending pots as many as three hundred females loaded with spawn—three million of eggs! Many of the largest lobsters I have seen have been females with spawn—these are all counted and all go to market. What a wise law! to allow the killing of the mother fish and forbid

the destruction of those under ten and one half inches. One day's fishing of one boat will under these circumstances destroy more lobsters than all the boats on the Atlantic coast in a whole season catching small lobsters. When the catching of female lobsters with spawn is prohibited then the nail is hit on the head, and not till then. All the most intelligent lobster fishermen I have met express the same opinion, and I think every one will see the reason. I spend three months of every summer among the lobster fishermen, where thousands are caught every day, and I know what I speak. Some curious facts in relation to the movements of lobsters are noticed at Noman's Land. They are taken having plugs used only on the coast of Maine, others from other points remote. Some seem to remain in one locality, and in midsummer school lobsters appear. When the water is clear they have been seen by the thousands, all coming from the eastward and moving with us much order as an army. Hoping this may call the attention of all interested in the subject, and that the FOREST AND STREAM may add another laurel to its crown for benefiting the community is the wish of a subscriber from its first number.

J. E. J.

CARP ON THE TABLE.—The Centerville, Md., Observer says: "Last week Mr. Richard Holliday, desiring to taste the flavor of carp, drew from his pond two fish, one 13½ inches long and weighing one pound fourteen ounces, and the other 1½ inches long and weighing one pound eleven ounces, and invited Hon. James T. Earle, Dr. John C. Earle, Richard T. Earle and Samuel T. Earle to take breakfast with him. After giving the new fish a fair trial they all pronounced them equal to almost any and superior to many of our saltwater fish, having none of the flavor of the mullet or sucker fish, and equal to rock or perch. These fish were obtained from Fish Commissioner Huggitt, just about one year from the day the breakfast was given. These something like two inches long, and have made their great growth since that time."

FISH CULTURE IN MICHIGAN.—A correspondent informs us that on account of storms and cold weather there has been a short crop of whitefish eggs in Michigan, and that instead of the forty millions which the commissioners were prepared to raise they were only able to gather some five million or there millions. There were hopes, however, that if the weather improved a considerable addition could be made to this number.

Sea and River Fishing.

EATING NEGLECTED FISHES.

PENSACOLA, Fla., Nov. 26.

Editor Forest and Stream:

I have read your editorial on "Neglected Fishes," in the issue of the 18th, with satisfaction, and am glad to see the matter brought before the public by so popular a paper as the FOREST AND STREAM.

That so many kinds of fishes are generally deemed unpalatable or unwholesome had long been a wonder to me, and an acquaintance several years with the Italian, Spanish, French and German fishermen of the Gulf coast has not done much to change many of my prejudices, led me to observe their use of species that we condemn, and to make personal investigation.

Since it is about as cheap to catch choice fish as others on this coast, and the poor can as well afford such fish as bluefish, sheephead, mullet, etc., instead of skate, sharks, etc., it is rather curious that necessity that influences them to eat the latter.

The European fishermen, holding to the habits and manners of their own country, are doubtless the cause of this, to the majority of American minds, peculiar taste. By association with them the natives of the coast have learned to add to their variety of fish-food and have also become aware of dainties which they once did not know of.

Therefore it is not strange that we find kinds of fish in quite common use on the Gulf coast that are thrown away on the North Atlantic side, which might, as suggested in your article, be utilized as cheap food for the poor. Since becoming interested in this matter I have not confined my curiosity to noting what others have done in the way of discovering new forms of fish-food, but have myself tried still more novel dishes and generally with good results.

During the winter of '79-'80 I was on a long cruise along the Florida coast with partly the object of securing as many strange specimens of fish as possible. In catching these many of the common kinds were used, which, as from the markets, were not always procurable, made up many a good meal. Partly for change and curiosity and partly for the value of the knowledge in giving their histories, I had cooked quite a number of fishes that are not often eaten anywhere, as far as I know. Shore people were sometimes invited on board our vessel to dine, and it was very amusing to watch their astonished faces when catfish or equally despicable fishes were placed before them.

On one occasion, while going from Ocklawaha Bay to St. Marks, I laid out to feast the pilot on dainties of this sort. The cook brought in first a stew or chowder of minnows, very nicely prepared, which the pilot declined, but finally followed my example in eating heartily of Fried bill-fish and two or three other unusual forms were next presented, received with suspicion and then accepted and pronounced good; but when the cook was told to bring on the shogren eggs (farina pudding in disguise), which, as from the markets, were not always procurable, made up many a good meal. Partly for change and curiosity and partly for the value of the knowledge in giving their histories, I had cooked quite a number of fishes that are not often eaten anywhere, as far as I know. Shore people were sometimes invited on board our vessel to dine, and it was very amusing to watch their astonished faces when catfish or equally despicable fishes were placed before them.

Fearing that what I have to say will be classed among the fishy of the fishes, I will endeavor not to drop into anecdote, as Silas Wegg is said to have dropped from prose into poetry, and will briefly mention some of the "Neglected Fishes" that I know of, and which, as from the markets, were not always procurable, made up many a good meal. Partly for change and curiosity and partly for the value of the knowledge in giving their histories, I had cooked quite a number of fishes that are not often eaten anywhere, as far as I know. Shore people were sometimes invited on board our vessel to dine, and it was very amusing to watch their astonished faces when catfish or equally despicable fishes were placed before them.

Salt water catfish, which are excessively abundant on this coast, and are the best of net fishermen and anglers, are, I consider, quite as edible as the red-fish or channel bass, al-

though they are not to be so easily prepared for cooking. Their flesh needs to be cooked longer than the most of salt water fishes, and is especially good in chowders. The skip-jack or lady-fish, a *scorpenoid* of the South, is a very common fish and is seldom eaten because of its soft flesh and fine bones, which is excellent when fresh. The creole of this vicinity occasionally eat them. The paddlefish (*Batrachius latro*), resembling somewhat the sculpin of the North, has very palatable flesh, which can be used to best advantage in chowders. A sea variety, recently described as *Batrachius tatei*, *subsp. pardus*, Goode and Bean, is considered a great delicacy among the French of New Orleans.

Garc, or bill fish (*Belonidae*), are very numerous on the southern coasts of this country, yet are not eaten in many places. I attribute the prejudice against them to their form and the color of their bones, which are of a greenish hue, for there can be no cause for dislike to their flesh, which is firm and sweet and can be very easily prepared for use. All whom I have known to test their edible qualities have spoken highly of them.

The sand-divers, goanards (*Triglidæ*), and the yellow-tail (*Elegatis plumbeus*), are very fine food fishes, and are invariably thrown away in this country as valueless. The last mentioned is eaten in many places in Cuba, and at Havana appears in the market uncooked, and upon the streets cooked and all ready to be served to customers.

Many of the countless number of female fish commonly called minnows make agreeable and nutritious food when cooked in certain ways, and as they can be caught easily and in large quantities would sell cheaply. The Spaniards and Italians are very fond of these minnows cooked in soups or stews. Of this class I have tested with good results two or three kinds, chiefly *Chirocentrus pinus*, Goode and Bean; silversides or fish, *Menidia menidia*, *Paralichthys grandis*, Baird and Girard, and *Cyprinodon variegatus*, Lac.

Among other uncommon fishes I have noted the use of the cow-fish (*Ostracion quadricornis*), as baked in its bony covering. Some species of *Tirodon*, puffers or blow-fish and the squid.

This last is more commonly used than the other, and is highly esteemed by the fishermen of the Northern and Western Gulf coasts as cooked in soups. There are instances among the natives of the Gulf of Mexico where the fish is even while yet alive, but is by no means a common practice.

If those of the readers of your valuable paper who are favorably situated or spend some of their time on yachting and camping excursions would interest themselves in this matter and test the edible qualities of some of the unsightly fishes that they are in the habit of throwing away, I will venture to predict that they will be pleased often more than disappointed with the result.

SILAS STEARNS.

THE DEATH TRAP IN SHINNECOCK BAY.

NEW YORK, December 7, 1880.

Editor Forest and Stream:

I have read with great interest your articles on "The Death Trap in Shinnecock Bay." Mr. Lane, referred to in the article in your paper of November 11, is mistaken in saying that the act was passed in 1877. The law was passed in 1877 (see Session Laws of 1877, chap. 362). The following is a copy, verbatim, of this law, taken from the Session Laws of 1877:

[Copy.] LAWS OF 1877, CHAPTER 362.
An Act to empower the Board of Supervisors of Suffolk County to appoint three commissioners to locate an inlet from the Atlantic Ocean to the Shinnecock Bay in said county.

SECTION 1. The Board of Supervisors of the County of Suffolk are hereby authorized and empowered to appoint three commissioners to locate an inlet from the Atlantic Ocean to the Shinnecock Bay, within one year after the passage of this act, to locate an inlet between the waters of the Atlantic Ocean and Shinnecock Bay, in said county of Suffolk, and the said three commissioners so appointed shall have full power to locate said inlet at such a point as they may deem best for the benefit of the people residing on or near said Shinnecock Bay, and to prevent or prohibit the opening of any other inlet or inlets at any other point or points on said Bay.

Said commissioners shall hold office until their successors shall have been appointed, and shall be subject to removal at the pleasure of said Board of Supervisors.

§ 3. Any person or persons who shall open or aid in opening any inlet or inlets between the Atlantic Ocean and Shinnecock Bay, contrary to the authority of the commissioners hereby appointed, shall be deemed to be guilty of a misdemeanor.

This is an important matter, and I have lately given it some attention, having recently been at Grounds and witnessed the evils mentioned in your articles. There has been no amendment to this law, and I can find no other law relating to this inlet passed since that year 1877.

The commissioners have, as I have been informed, "relocated" the inlet at a point east of the former location. This has given rise to dissatisfaction among many residents along the bay for the reason, as it is claimed, that the inlet at the "relocation" will not run more than a few weeks; that it will certainly close in a short time, and then the head of water which has accumulated will have run out and a delay of many months will ensue before water will accumulate in the bay sufficient to open another inlet. It is complained also that no steps will be taken by the commissioners to open the inlet at the "relocation" until spring, and that the result of all this will be that the bay will be ruined as a sporting resort. It seems to me, on reading the law, that the remedy for all this is simple and is in the hands of any of the residents who possess public spirit enough to carry it out.

First. This so-called "relocation" is entirely outside the authority of the commissioners. By section 1 of the law of 1877 it is made the duty of the commissioners, within one year after the passage of the act, to locate an inlet. This is the only authority given them to locate an inlet, and it is plain that the act of "relocation" is a violation of the law. In 1878, they have no power to locate an inlet. They did locate the inlet during the "one year," at the western point, and it was opened and remained open till recently.

It is clear that the commissioners having in accordance with law "located" the inlet at the western point, as soon as they had done so were "functus officio" as far as locating the inlet is concerned, for the law gives them power to locate an inlet "at such a point as may to them seem best for the interests of the people residing on or near Shinnecock Bay." They decided that the western point was such a point, and having done so, and having located an inlet, their authority to locate came to an end.

Second. As it was almost the unanimous opinion of the residents near the Bay with whom I conversed that this western point was the only proper point for an inlet, the only point where one would remain open any length of time,

it seems to me the remedy for the present trouble to be in reopening the inlet at the spot where it was originally located by the commissioners—the only legal location ever made. There are many men ready and willing at once to go to work without compensation and dig out the inlet at the old location, but are deterred by fear of punishment under the 3d section of the law should they do so. This section provides that any person who shall open or aid in opening any inlet or inlets contrary to the authority of the commissioners shall be deemed guilty of a misdemeanor. It seems to me such fears are groundless. The commissioners have "located" the inlet at the western point, they having authority to prohibit openings only "at other points," all subsequent "relocations" being without authority and void, they have no right or authority to prohibit an opening at the point of original location. If the residents wish to save their bay as a shooting resort, let them some day this month go in a body to the western point, the point of original location, and dig out an inlet.

JUSTITIA.

RANGE OF THE CATFISH.

AS a further evidence that the statement of Dr. E. Sterling, of Cleveland, O., who is usually very careful and accurate in his assertions, in FOREST AND STREAM of November 11th, Vol. 1, page 287, that the extreme Northern range of the catfish is in Lake Erie, I wish to present to your readers the following facts:

My boyhood days were spent on my father's farm in Niagara County, New York, on the shore of Lake Ontario. And I used to frequently spend the pleasant summer evenings in fishing for eels and bullheads from the beach. Sometimes I would set my rod by fastening the bait in drift wood, or otherwise, leaving the baited hook in the lake over night, and generally had the whole line tied into a close knot with an eye in intimate proximity as the result. But one morning when I reached the lake, I found my rod with the tip newly in the water, and could see with my boyish eyes appeared to be a whale, but which proved to be only a catfish—probably *Ambloplites nigrificans*; although, of course, I cannot recollect, if I had known then, the specific characteristics well enough to be certain. It weighed 94 pounds, which made me high look among the boys as long as I lived there. The fish was white, with black spots on its belly.

Both the hook and line were of small size for eels, neither of which would have held him for a minute had it not been for the elasticity of the rod, which was set so as to give when it must, and take when it could. Another illustration of the fact that the rod should always kill the fish.

Grand Rapids, Mich.

In a recent issue of your paper, Dr. Sterling says: "The extreme Northern limit of the catfish is, you may be certain, about Lake Erie." During the past summer I took a number of them in Lake Rosseau, Ontario, and in the Magnetawan River. Both these localities are considerably north of Lake Erie.

December 7, 1880.

Is it the POLE FLOUNDER?—The Belfast, Me., *Journal* mentions a strange fish which should be sent to Prof. Baird for identification. It says: "Mr. Collins has at his fish market in this city, a specimen of flounder entirely different from what are usually captured in our waters. For two years, late in the fall, this flounder has made its appearance in our harbor and taken the hook quite readily." Mr. Collins says that they are the deep sea or Arctic flounder. The fish run very large, weighing on an average one pound each. Another difference is that the deep sea flounder is now filled with spawn, while the inshore variety do not spawn until spring. The deep sea flounder is caught off the coast in traps, or flyers, as the fishermen call them. These traps are made something like a lobster trap in which fish food is placed to tempt them inside. When once within the pound of the trap the fish is secured and is hauled in by the fishermen. They are a very excellent pan fish.

LETJANUS BLACKFORD.—In speaking of the immense numbers of this fish which have within a few years occupied a prominent place in our sea-board markets the *New Orleans Democrat*, says:

By a visit to our principal markets yesterday we learned that during the past week there was an enormous importation into this city of that highly-prized luxury and valuable article of food, the red-snapper. The supply of this fish along the whole coast is inexhaustible. The red-snapper grounds are estimated to extend 900 miles. It is only a question of labor what amount can be caught. They are found in countless myriads at all seasons, in a certain depth of water, say from fifty to eighty feet. They are caught with lines having a number of hooks, which are eagerly seized by the fish. It is pretty hard work to draw up these lines with such a number of these heavy fish attached to them. Windlasses are frequently used to draw them up. In a very few hours the wells of the snucks are filled with them. To prevent their floating, and keep them alive until the port is reached, it is necessary to reduce their bulk by compressing the large access of air accumulated in their long passage from a great depth of water in which they are brought to the surface. This is done by a small incision just below the gills, which operates as a vent through which the air escapes until the fish is reduced to its natural size, so that it sinks and keeps alive and healthy. It was through this simple suggestion that the red-snapper became a great commercial fish. Previously it was found difficult to bring them to market fresh. Now they can be caught in far greater abundance than any other fish. There is a large fleet and a large number of men employed in this fishery. As the value and cheapness of the red-snapper begins to be generally appreciated throughout the West, this industry will be greatly increased. With comparative labor and easy transportation, we believe that in time this business will equal in its proportions and extent the cod and mackerel fisheries of Massachusetts. The abundance of the red-snapper in the Gulf is equal, if not superior, to that of the cod off the coast of Newfoundland. It is a far better fish than either, and involves less labor and expense in filling the demand and in transporting it fresh to any of the interior towns.

THE MARKETMEN are now receiving large quantities of game, both large and small. The largest portion is received from the following States: Kentucky, Massachusetts, Virginia, Maryland, New York, Iowa, Nebraska, Missouri and the Red River region.

Game Bag and Gun.

The man who thinks that he can afford to pay the farmer's boy more for quail than the boy is paid by the baggage-masters is invited to send his address to this office.

DISCUSSING THE GAME LAW.

THE regular monthly meeting of the Long Island Sportsmen's Association was held at the Royal Acunium Room, Music Hall, Brooklyn, Dec. 10, President Chappell in the chair. Mr. Abel Crook reported that he had gone before the Supervisors of Queens County to address them on the subject of making a law in Queens County similar to the one now in force in Ulster County, which would prohibit the killing or shipping of all wild game for market except the wild fowl. This created considerable discussion, a portion of the members thinking that such a law would make enemies of the farmers. Judge Lot said that a large majority of the farmers of Queens County were in favor of just such a law. It was finally decided that the supervisors of Queens County to enact it. The Coney Island Rod and Gun Club, Capt. W. L. B. Steers, President, with eighty members, was then elected by acclamation to the association.

Captain Steers thanked the association, and said that the members of the club were more excited with the red than with the gun, but there were a few good shots among them. Judge Lot remarked that as the President of the Coney Island Rod and Gun Club was some on the rod he might have a chance to meet Seth Green and give him a proper "steer." Captain Steers was then elected a member of the committee on fish and game.

It was decided that the president should call a special meeting of the executive committee to appoint sub-committees. Mr. Crook made a motion, that was carried, to the effect that the association should apply to the Legislature for a charter of incorporation, which would give them the power to elect constables, to employ detectives, to purchase game and fish for breeding purposes, to punish trespassing, to furnish licenses to shoot, and constituting each member of the association a game constable.

The prize committee reported progress, and were granted permission to increase their number if they saw fit. Mr. Nicholas Pike was then requested to address the meeting.

Mr. Pike read the following paper: "Members of the Long Island Association.—For the past year I have exerted myself as much as possible in gaining information from competent persons relative to our existing game laws. From my own observations also I am convinced that alterations and additions should be made to them to prevent the wholesale destruction now going on, not only of our game, but of our song birds, which at the rate it is now progressing must end in their extermination. Below I append the changes I would recommend in our game laws."

"Relative to the shooting of wild ducks and geese.—The use of floating batteries, machines or other devices whereby the gunner is concealed, or shooting therefrom: use of decoys or construction of bow houses at distance from the shore of more than twenty rods should be a misdemeanor of Long Island. Sailing for them, or shooting from sailing or steam vessels or structures attached to the same, should be made misdemeanors with added penalties throughout the State."

"The reason for which I recommend battery shooting to be discontinued is this: There are many persons in the Great South, Peconic and Shinnecock Bays who gun for a living, and gun incessantly from daylight till dark, and often far into the night through the whole season. Now it is well known to sportsmen that if ducks and geese are constantly disturbed at night or early morning while on their feeding grounds they will eventually desert the place. The late Governor, Sirs once told me that it was his opinion that battery shooting was quite despicable, the sportsmen of the State yearly becoming scarcer and leaving their accustomed haunts. The law as it now stands for killing these birds between sunset and daylight, with or without a lantern, is all right."

"Curlews, godwits, willets, sandpipers, snipe and all birds commonly known under the name of snipe.—A stringent law should be passed prohibiting the shooting of these birds except between the 1st of August and the 1st of January. Spring shooting should certainly be forbidden."

"Quail and Hare should be passed under the heading of the quail on Long Island for the next three years. They have become so scarce of late years that there are comparatively few left. I am informed by sportsmen that trapping, robbing of nests and shooting out of season are rapidly exterminating them. In my rambles about the island I do not meet half a dozen in a week, where formerly in the breeding season I could hear them calling in every direction."

"Ruffed grouse or partridge.—I would recommend a law preventing these birds also from being shot for three years. Formerly they were very abundant on Long Island. Now they are so scarce I rarely see one anywhere, and if this law is not soon passed our partridges will soon be extinct."

"Woodcock.—The time for shooting this bird should be changed. It ought not to be molested until the 1st of October. I would like to leave it until the 1st of November (so that sportsmen should have no excuse for shooting young quail by mistake). If woodcock are shot before the 1st of October they are in poor condition, and have not acquired their full plumage. Some that I saw shot in August did not weigh five ounces, were thin in flesh and the primaries of their wings were not fully expanded; and I think that every sportsman will agree that the change is a good one."

"Hails.—Clapper, sora, Virginia and lesser rails.—There is no law relative to the protection of these birds, and I would recommend there being one prohibiting the killing of them for the next three years under a penalty of \$10 for first offense, and for second imprisonment in the county jail for three months. Rails, once so numerous about our marshes, creeks and rivers, are now scarce, and there should be no delay in passing this law. Although rails are very prolific laying from sixteen to eighteen eggs at a time, there is a regular system of robbing the nests by persons living in the vicinity of the marshes."

"Eagles, night hawks, martins, whip-poor-wills, swallows, woodpeckers, meadow larks, thrushes (*Turdus migratorius*, robin, etc.), wrens, warblers, and all the native song birds.—I would have the penalty for killing any of these birds \$10 for the first offense and for the second imprisonment for not less than twenty days nor more than three months in the county jail, and forfeiture of gun. One great cause of this wholesale destruction is the small boy, allowed to carry firearms, who shoots at everything that flies. Last summer I saw in

basket carried by a small boy nearly two hundred small birds, including two woodcock that I am sure were sitting birds, the result of a day's shoot by four or five larger boys. Once I met a man, evidently a foreman recently arrived, who knew nothing of our laws or language, with a bunch of seventy-two wood-thrushes from his morning's work. As I traverse the woods of Long Island they are now to me painfully silent. A few years ago the woods resounded with the song of birds as they flitted from tree to tree, and their nests were in every bush. The sweet notes of the chat, the pretty warblings of that little ventraliole, the mocking wren, and the song of the melodious wood-thrush are now only heard occasionally.

"For the destruction or robbing nests of wild birds.—The present law is a good one, with the exception that it is not stringent enough. I would make the penalty \$10 instead of \$5, with imprisonment; and for robbing the nests of any song birds, partridge, quail, woodcock, rail, black and other ducks, excepting for scientific purposes, I would make the fine for the second offense \$25, with imprisonment in the county jail for three months and not more than six months, according to the enormity of the offense. My reason for recommending a heavier fine for robbing nests is this: The present fine of \$5 is not enough to intimidate the thief nor even the small boy whose father pays the fine. For example, a man was arrested for robbing birds' nests in the woods of Jamaica. He was fined five dollars and I heard he said that five dollars was only five out of the thirty he could make out of the sale of his day's plunder which he had concealed. Out of more than fifty nests watched by members of the society for the protection of song birds only four remained unrobbed, and of these two were robbing of the young birds by these Vandals before they were fledged.

"Trapping or feeding birds with prepared grain for the purpose of destruction.—Any person using traps or snares of any kind for the capture of any wild birds, or using grain soaked in alcohol or any other stupefying drug for the purpose of capturing them, shall be guilty of a misdemeanor and fined \$10 for the first offense and \$50 with imprisonment for not less than three or more than six months in the county jail for the second offense. The enforcement of this part of our laws should have the most serious attention, as not one person in a thousand has the remotest idea of the extent to which the above is carried on. Hundreds of birds are trapped and captured yearly. I have destroyed double the number of traps this year, 1880, than I did in 1870, and have picked up birds in a stupefied state I had taken for dead. This proved two things—viz., that trapping is on the increase, and that the present law is a dead letter, as there is no one to enforce it.

"Game protectors.—There should be appointed three more protectors, one each for Kings, Queens and Suffolk counties. Their term of office and pay should be the same as those now given to the eight protectors now in office; but the Governor should appoint them through the recommendation of a committee appointed by the presidents of the State and Long Island Associations for the Protection of Fish and Game.

"License.—There should be a law passed to prevent any person from hunting with gun or fowling piece in the three named counties, unless they have a certificate issued by the Supervisors of the county. This certificate should give a detailed description of the person to whom it is issued, always to be carried when out hunting, and be shown to the protector when asked to do so. Non-presentation of the certificate will make him liable to arrest. The price charged for the certificate should be \$10, and all moneys so collected should be handed over to the County Treasurer for the benefit of the county. The importance of this law is recognized in every civilized country except this. The passage of such a law together with the appointment of protectors strikes at the root of the difficulty, and without it all other laws will be (in my opinion) a dead letter. The indiscriminate use of fire-arms, which are in the reach of the poorest person, the cheapness of powder and shot, and the freedom extended to every one to roam our forests and destroy everything that comes to hand, are great inducements to continue this murderous work, and will, if unchecked, in a few years destroy all our song birds and many of the game birds of our beautiful island. Now the most important part of the laws thus recommended if passed would be the appointment of protectors, or game constables, and license to shoot. I should strongly recommend that these officers be appointed and governed by the State laws now in force rather than in any other way. By being appointed by the Governor it gives them more official authority, and they would have it pointed out, as they would be acknowledged and paid by the State. Now, if a law should be passed allowing the Long Island Society to appoint, it would be considered a local affair, and appropriations for the payment of these constables would be refused. But if a law should be proposed such as I recommend it would pass undoubtedly, and the Presidents of the State and Long Island Associations would have the power in their hands. The President of the State Association would always, out of courtesy, request the President of the Long Island Society to name his candidates for office, as the best judge to select proper persons. There would be no responsibility for payment of these officers, as the State would assume that. But if local legislation is resorted to I do not believe one farthing would be appropriated for such a purpose. The people are opposed to such use of moneys, as our taxes are now high enough. If resort is had to clubs it will certainly fall through. The above suggestions will meet all objections so far as police are concerned and will remove these appointments out of the reach of the politicians."

After the reading of the above paper Mr. Pike was tendered the thanks of the Association and elected a member of the Game Committee. The meeting then adjourned.

The Game Law Committee of the Long Island Sportsmen's Association met last Saturday evening, Capt. W. L. B. Steers in the chair. The members were present and read the suggestions of Mr. F. S. Wager, of Rome, N. Y., respecting sluiceway dams was adopted. Mr. John N. Bahcock, of Syracuse, wrote:

"In perfecting the game laws for next season permit me to suggest that in the eighth line in section 23 as amended May 31, 1880, there be added after the word tributaries, 'nor in Seneca, Oneida or Oswego rivers or their tributaries.' That is the way the original bill was drawn for I have seen it, and these three rivers were inadvertently left out. Also added in same section 23, after word 'minnows' in 15th line, 'in any other manner.' I would also call your attention to the last claim of section 23 in which is stated that all nets, etc., etc., are declared contraband, and may be destroyed without liability to persons so finding and destroying.

"That right to destroy is a mooted question so far as I can learn, and has never been judicially decided. If a person can so destroy such nets, etc., under such circumstances and not be legally liable, it is a first-rate clause; if they cannot, it is a second-rate clause, and very trouble. Our Onondaga County Fishing Club have a suit now pending on that very question, on account of our game constable." The suggestions in this letter were also adopted.

Mr. Hasbrouck, of Ellenville, wrote as follows: "I wish to call your attention to section 25 as to fouling waters. That section as it now stands is an utter nullity. If possible it should be amended so as to be operative. Our brethren in several of the Western States have taken an interest in this matter, and I believe, in Canada, where it is made a misdemeanor and a penalty inflicted as well. Tanneries are compelled to run their leachings in sink holes, where gradual absorption will take place, or in the neighborhood of cities and villages into vats, where the valuable liquid manure may be utilized for fertilizing purposes, for which it is admirably adapted and would be a source of profit to the tanner. In the case of saw mills they are compelled to burn the sawdust and dust, or otherwise dispose of such waste, but not run it off into the stream, destroying the fish and the spawning beds. The lower part of a fine large stream in this vicinity has been utterly ruined by a large tannery erected upon it a few years ago and now in active operation. Last spring when they first let off their leachings at the time the fish were ascending the boys in the neighborhood picked up basketsful of fine fish, and among them over 100 fine trout, one weighing over two pounds. The salmon part of this stream was famous for its fine trout in former years, and would be again if the tannery could be interdicted from discharging its leachings into the stream. The same may be said with equal truth of another tannery near by on the Upper Rondout, one of the finest natural trout streams in the State. The stream was rapidly filling up with trout, when two years ago tanning operations were resumed, when the same sad results occurred; nearly every fish, except a few small warblers, suckers and red fins, were killed for several miles below, and the beautiful, limpid waters made to reek with odors like a cesspool. It may be that the time has not arrived for such legislation, yet it seems to me reasonable that if younger States can pass and enforce such a provision surely the great State of New York should not be behind in progressive ideas."

This was also adopted. A lengthy letter was received from Dr. Hart, of Hudson, N. Y., in regard to the restrictions on waterfowl shooting on the Hudson River, and he thought that there should be very few restrictions, as there did not very many waterfowl stop there, and those that did only stay a short time. The committee were greatly in favor of the above, and the letter was placed on file for further discussion. It was decided to make the law in regard to the meshes of nets read "a number of inches square," instead of "a certain number of inches." Now a net with a one-inch mesh can be made to measure two inches, but it made to measure two inches square, they cannot do that. Mr. Chappel then showed a collection of six fish. A yellow perch which would weigh 2 lbs. and one that would not weigh half an ounce were shown, both of which were caught in the same net. He also showed several different varieties in the same way. He said what is sold for whitebait in our markets is nothing more or less than the fry of all kinds of fish, and also that what is used as a bait fish until it is sold stopped. It was decided to adopt this provision. That no net or sieve should be used in Coney Island Creek, or in Gravesend Bay, within one mile of the mouth of said creek, excepting between the first of October and the first of April, and then the mesh must be four inches square. After a discussion on the size of fish allowed to be sold the meeting adjourned to meet at the Fountain Gun Club rooms on Saturday, the 18th inst. If any section of the State wishes to have a gun in respect to game laws, it is requested to write as soon as possible, as the next will probably be the last meeting of the committee.

OUR PHILADELPHIA LETTER.

THE admirable articles on the wild fowl of our country which appear in *FOREST AND STREAM*, especially the column on the marsh, upland, or fresh-water ducks, reminds your correspondent of the acute sense of smell they have as compared with the sea ducks. This is particularly noticeable in decoying geese and ducks. It is a well-known fact that the black ducks are also set, but always in such a position that the latter approaching the decoy may not catch the wind of the sportsman. Every duck approaching the decoys and crossing the line of wind from the boat or blind, no matter how deceptive it is, will at once "jump" or "climb" skyward the moment his exquisite scenting powers detect the hidden shooter. This I have noticed is not the case with the sea ducks, nor does the goose or brant appear to thus discover the blind, for they approach the decoy in every direction, oftentimes in the line of wind, without being alarmed. The mallard, black duck, pintail, baldpate, or widgeon and teal, of the list of "marsh ducks," all act in this manner, and it has struck me that this acute sense of smell is a characteristic of all ducks which, as a rule, are not deep divers in feeding and secure their food mainly in shoal water, where it can be obtained from the bottom without submerging their heads. The canvas-back, red-head and black-head, have never acted so in my experience, and may it not be that the lake birds hold good in the entire list of both classes, and that the marsh ducks possess the acute sense of smell and the deep divers the less sensitive olfactory powers.

Mr. Charles Whitman, in a letter to your correspondent, in describing his Pedigree, Donmuth's Kato setter dog, tells me that he would make him a finer show dog, but we question if there ever existed a dog with a more beautiful coat and feather than Peligro, to say nothing about his immense depth of chest.

In speaking of his kennel Mr. Whitman states he intends disposing of all his setters, a Petrel-Contt Dick, bitch, and a Druid-Cubas bitch, and devote his time entirely to his "black pointers." He has losses and he does not believe in training any dogs I ever saw. Stonehenge spoke so very highly of the black pointer and of their rarity that I turned to them, and am much pleased with my decision. They are no parlor dogs, but are stout in limb and body, heavily muscled, and show quality all over, with thick, glossy coats. The first quails the bitch (six months old) ever scented she pointed and stayed there while I killed several of them."

Mr. Whitman refers to the criticisms published on his calling his pointers "Spanish blacks," and asks my opinion on the subject and remarks, "I have the breeder of the strain in England as authority." We have never heard of such a breed of pointers, but do know black pointer puppies show themselves in many litters, and we cannot see but that by continued choice in breeding black to black for many generations, this color, if it may be called a color, might become the characteristic one of the strain. This breeding to color is noticeable in Mr. Theo. Morford's setters, and we find his dogs invariably orange and white (seldom freckled) with dark nose and eyes; and here let me state that even in the pedigree of Mr. M.'s dogs there appears a dash of Phish, a black and tan setter bitch, but away back. We mention this to show how this gentleman's continued sticking to the orange and white and dark nose and eyes in choice of sire and dam has finally overcome the showing of any other color in his litters. Some say there may crop out a black and tan. There never has yet, at least within the past five years, to the writer's knowledge. Will Mr. Morford inform us?

But to return to the name of Mr. Whitman's pointers, "Spanish black." We do not know that the breeder intends by such calling them to show they are of the old Spanish blood, and he errs here if such is his intention, for the color of this old breed was liver and liver and white, and even in Spain the strain as it once existed is never seen, having been modernized and refined by the lighter and speedier pointer.

Several of the late works on dogs mention noted breeds of black pointers as purely English, and without wishing to dispute in any manner, we think Mr. Whitman should give to his new importation the name of their breeder and await the result of the union of the dog and bitch he has purchased in the first litter. We trust he may find the puppies all black. We doubt it, however, but would be pleased to find that he has or will succeed in establishing a breed of pointers that will invariably "throw true to color." Shade of coat is no criterion to go by as regards superiority in the field; however, is merely fancy, and as saying that a dog is a good horse may be of the same color. And now turning from the dog to game again, what a trying winter the poor quail has in prospect. You have taken up a capital subject to ventilate Messrs. Editors, that of their protection, etc., and you correspondent particularly noted the reply to your call for the opinions of sportsmen in last week's issue of *FOREST AND STREAM*. I refer to the article signed by a member "of the West Jersey Game Protection Association," and in the first paragraph of so noble a gentleman as the author proves himself to be cannot fail to do great good, and he should be earnestly requested to furnish frequent letters. Hoxo.

In last week's issue "Homo" was made by the types to speak of the sale of vaccine by the "pint," whereas he wrote "points." Vaccine is ordinarily obtained in one of three forms, viz.: (1.) the dried crust; (2.) quills charged on convex surface with lymph; (3.) ivory points. In the same article, for "adulter" read "adulter," and for "hyperboreus" read "hyperboreus."

PENNSYLVANIA GROUSE-SHOOTING.

NOT since the opening of the Columbia and Port Deposit Railroad has sport been as good as this year in southern Lancaster County. The opening of the road through that hitherto inaccessible region of southern Pennsylvania was the signal for a rush of the sportsmen from Philadelphia, Wilmington and Baltimore, such numbers as in a few days had made clear that once famous game section of every game bird that chooses that romantic section for its habitat.

The time was when the sportsman of Lancaster cherished with no small degree of pride the fact that on the rugged hills on the banks of the Susquehanna that prince of game birds, ruffed grouse, was always to be found; and as we write we can recall the chagrin of many of our sportsmen, who, under the care of the regular game warden or game warden, Hopple, for days to bag one, but whose nerves were unstrung at each successive rise and whose shots were as often sent after the echo of the whir-r as after the hurrying bird.

We never can forget the quiet, pointed humor of the man first named above, that was so searching and provoking over one's failures as to cause the subject to persevere from day to day, until, worn out by sheer fatigue, he abandoned the getting of one trophy until the following season, when, ten to one, the same thing was again repeated.

Muhlberg, known far and wide among genuine lovers of field sport, is gone; but the memory of his interest in all that was noble in outdoor recreation has a deep hold upon the affections of the present generation of sportsmen in this vicinity, where he was best known and most appreciated.

Knowing that the woodland covering the hills bordering on the Perkasie—a stream emptying into the Susquehanna through a deep, wide cut—was again the hills following the river—was comparatively free from the inroads of gunners during the seasons of 1878 and 1879, we visited it, more for the purpose of seeing what could be found than in the expectancy of finding anything. The result shows what is possible if the birds in a country can only be left for a short time to replenish themselves. There could not in this section in 1877 be found a dozen grouse.

Getting out early in the morning for partridge, the dogs found a corner near the edge of a thickly wooded hill, which, on being flushed, flew to the cover. Following them, and finding the dog on a point just inside the wood, but beneath the thickest of green briars, to the throwing in of a stone four grouse got up simultaneously. This was too much for the writer, though used to the sound of their call-bell and noise of rapid flight since childhood. They got away while we forgot not to shoot, and the sight and sound of three or four birds in the air, and the partridge for that day. To call on the dog, to praise and encourage her was the first thing; then to move on cautiously, following the thickest of growths in the roughest of ravines, with dog always in sight and well in hand.

We were about giving up after a long and tiresome tramp away beyond the mid-day hour, when to the whistle for the ever-obedient dog we received no response. After a hurried look round, seeing a bird in the air, we followed it, and in almost clear sight the dog moved slowly onward, but soon got down flat and close, and the next instant two grouse got whirling away. By this time, having regained composure and knowing what was coming, both loads were sent after them, but only one bird secured. This was enough. There were birds on the hills, and we would have them. The dog, always in good position, and always ready to follow, was everything we ever saw, and every day acquired an inestimable value in our sight. At dinner, no thought of fatigue and we went on and on till dark with varying success.

The next day found us at dawn far up toward the top of the rugged, wooded hills. We feared the dog would show being tired from the tramp of the day before, but no. One, unseen, gets up wild, and from now until dark the dog gives a succession of surprises in her capacity. Night comes and new and new, so tired, so satisfied, so triumphant, so boastful of gunner as me in counting out fifteen grouse as the result of two days' work from sun to sun. No one with any less good dog could secure the same result.

Feeling that the success of this hunt was entirely due to the comparative rest the birds have had for two years we record this to encourage the efforts of game associations to preserve the game in the country under their control, satisfied that districts now without a partridge or grouse will soon agree to afford plenty of sport for the outlay of time and money in the rigid enforcement of the game laws. BRISKNOT.
Hartford, Dec. 6, 1880.

GEORGIA SHOOTING RESORTS.

AS the season has come when the question with many Northern sportsmen is, where good game sections are to be found, I will say a few words concerning this part of Georgia. I notice one of your correspondents is inclined to think that some of your correspondents have "axes to grind" when they call attention to localities particularly favored in the fall. Come, I can say more positively that this is not true, so far at least as I am concerned.

In the matter of climate this section leaves but little to be desired. We are below the snow level—I might almost say below the frost line. We have had only one light frost this winter, and the atmospheric conditions are certainly peculiarly suited to those suffering from lung troubles, the country being almost entirely covered with a heavy growth of pines.

We have fairly good railroad facilities. Of course the traveler will fail to find the luxurious appointments of the great trunk lines North, but a not too fastidious person can and will be satisfied.

Let some doubting Thomas may think I am overdriving I will put it very mild while I speak of the game to be found in this favored section. Quail are to be found in great abundance everywhere, a good shot will find difficulty in bringing forty or fifty to bag in a day's shoot, and a man who hunts with a bag alone can do better than this. In some localities, indeed wherever they find food and suitable feeding grounds, snipe are plentiful enough to afford good sport. By this I mean a sportsman can kill twenty-five to thirty in a day. A few miles in any direction from any point will give the sportsman superb duck shooting, and if the sportsman will leave the line of railroad a few miles he can have quail, snipe and duck shooting all on the same ground. A few deer are to be found, and wild turkeys are fairly plenty.

Accommodations, price of same, etc., of course vary. The highest-touted sportsman can find those suited to his taste, and the man who will be satisfied with good, clean, comfortable quarters and food can be suited as well.

The better class of our people will gladly welcome as friends and companions in the field all gentlemen who will report themselves as such. There is enough and to spare of sport for all who may come, and I will for the love I bear the guild of sportsmen cheerfully aid and helpfully introduce all who care to avail themselves of my services.

To those who desire more specific information I will be happy to communicate by mail. ALBERT WINTER.
Cairo, Thomas County, Ga., Dec. 6.

THE INTRODUCTION OF GAME BIRDS.

WHILE noticing with interest the laudable efforts of gentlemen sportsmen and game protective associations throughout the Eastern and Middle States for the introduction and propagation of migratory quail, the thought has often presented itself, while making efforts to better directed, and with a much fairer degree of success, toward the introduction of the noble game bird the pinnated grouse, or prairie chicken? In the one case it is a bare experiment, dependent for its success upon whether they will migrate and return; while in the other, it is almost an assured success.

The rigors of our winters' deep snows and consequent scarcity of food is almost certain destruction to our quail, either native or imported, while the hardness of the pinnated grouse, coupled with its habit of taking to timber in the cold season, adapts it to the extremes of climate, as well as to our own ruffed grouse, or "pinnated." That it is singularly fitted to withstand our severe winters is amply proven by the vast numbers found in Wisconsin and Minnesota, where their winters exceed ours both in duration and severity.

While I fear we must admit that the introduction of migratory quail has not met with that success for which it was hoped, yet it is a "step in the right direction," and I trust will lead to like experiments with both the pinnated grouse and California quail. As to their game qualities and the pleasure of bagging the one or the other there can be no comparison. Every sportsman who has shot ruffed grouse and our native quail knows with what additional pleasure he exhibits the spoils of his day's sport if among a goodly number of them he can also count two or three brace of *Bonasa umbellus*. They are a bird worthy the skill of our most ardent sportsman and in whose pursuit nothing but the stanchest and the best of dogs will reward the hunter with success. While being more easily found and, as a rule, lying better to dogs, would be scarcely less difficult to kill (as they would take to timber on being flushed), and when bagged but little inferior to its lesser cousin. Our diversified landscape of hills and valleys, barren mountains and cultivated fields would afford immunity from extremes of temperature as well as danger of extermination from dog and gun. An effort to introduce the noble grouse would meet with the hearty approval and, I doubt not, substantial support of every eminent sportsman in the Eastern and Middle States. PINNATED GROUSE.

SULLIVAN COUNTY—*Elmdale*, Dec. 5.—Monday, November 22, I hunted deer alone and killed a fine buck. He weighed 150 pounds. On Thursday of the same week I hunted again with a companion. In the morning I drove two fine bucks over the stand before George got there; and in the afternoon started and drove a fine pounder to George and he shot him dead. On Monday I hunted with a gentleman from Hancock, Mr. Kelsey and James M. Wheeler. Mr. Wheeler shot a fine deer before 8 o'clock. Tuesday, George Dunlap and I hunted again and started ten deer, but did not kill any. It needs six men to hunt them here, but the season is at an end for this year. Partridge, rabbits and hares have not been more plenty for several years. HUNTER.

HE WILL MAKE AN AFFIDAVIT.

Editor Forest and Stream:

Some weeks ago I saw a controversy in your paper about trapped quail on Long Island. I know the letter-writer in your of the 11th stated the truth, while the indignation of the Long Island Game Association, as expressed in your number of the 18th, appears to me rather uncalled for, at least in the face of my experience. For the benefit of the association I will state the facts and details.

On returning from the field trials Friday last, on the early train, I think it was about 9 o'clock—really overlooked name of station—the newsboy offered me a dozen quail, which he told me the baggage-master told him to sell. I examined them carefully and they were trapped birds. The boy claimed ignorance of everything. All he knew was to sell his birds. Now I have no interest in Long Island, never pulled a trigger there nor expect to; but if my brother sportsmen of the Long Island Association want me they can call upon me at No. 43 New Street, New York. I will make any affidavit they want. I further give them these points: (1.) It is unlawful under our State laws to sell trapped quail. (2.) It is against the rules of the Long Island Railway for the baggage masters to carry anything except checked trunks—everything else must be carried by Westcott's Express. (3.) The Union News boys act contrary to rules by peddling for the baggage-master instead of his employees.

Now the proper thing is to complain at the railway office by calling upon Mr. Sharp's complaint at the Union News Company, and commence suit against the baggage-master and boy on the through train. Send a detective on the train for a few mornings and he will corroborate every word I say. Before closing I confess I can't understand why this illegal huckstering can be allowed. If that had happened in my country I would have stopped it long ago. There need be no complaint about an anonymous communication this time. A. E. GODEFREY.

Guyard, Orange County, N. Y.

WILD GEESSE AT SILVER LAKE.

Boston, Dec. 6, 1880.

THE writer had the good fortune to be present at and take part in some shooting at wild geese considered very remarkable, and which might be thought of sufficient interest to be much known. The locality was Silver Lake, Mass., where so many regattas have taken place. The stand where the birds were shot at is on the west side, near the grand stand for viewing the races, and called Widgeon Point. The shooting was on Thursday last, Dec. 2.

Ten geese swam up off the stand, and all were shot, only one of which had to be shot over from the boat which went on to recover the birds. This was about sunrise. About 10:30 A. M. a large flock, twenty-one in number, were seen flying over, well up in the air, and by stirring up the live decoys noise enough to turn them back and they lit in the south end of the lake. After staying there some time they rose, and after wheeling several times within shot of the stand they went down in the water in a cove, almost within shooting distance, then swam up toward the beach in front of where seven of us were waiting, hardly daring to move for fear of scaring them away. When they were directly in front of us, swimming well together, the word was given, "Get ready! Are you ready? Fire!" and the contents of seven guns poured into them, only two or three made the least attempt to start, and they were shot at once, and the whole number, twenty-one, lay dead. The most remarkable part was that not one of them required shooting over from the boat.

This is said to be the most remarkable shot at geese from a stand ever known to be made in the county (Plymouth). I would also add that out of four bunches of geese decoyed to this stand—viz., eight, six, ten and twenty-one, forty-five in all—not one escaped. B. C. M.

SOUTHERN FLORIDA—*Lafayette, Ind.*, Dec. 9.—In your last number of *FOREST AND STREAM* you speak of a party of gentlemen who intend visiting Southern Florida and will endeavor by sailing down the Kissimmee River and through Lake Okechobee ranch the Caloosahatchee River and eventually Charlotte Harbor and the Gulf. Have been through this section of Florida, and shall avail with interest the report of this party. Will you kindly give me the names of the members of the expedition? The old boat "Forest and Stream" was secured by our leader, Mr. Ingram Fletcher, of Indianapolis, at the time it was abandoned by your exploring party. Mr. B. H. Rosseter, who has been several years in our trips through the Kissimmee country, and do not think it possible to pass from Okechobee to the Gulf by boat at ordinary stage of water without making some long portages. Three years ago, after heavy rains and when Southern Florida was partially submerged, Messrs. Driggs and Peise (the former from Michigan and the latter residing near Ft. Bas-senger) made the trip by boat. The old "Forest and Stream" was an excellent boat and well adapted for exploring in the shallow lakes of Florida. She now lies a wreck on one of the islands in Lake Tahapekalzin. E. A. E.

WEIGHTS OF RUFFED GROUSE—*Hornellville, N. Y.*, Dec. 5.—I have just written to your correspondent not to send his plume to "Ruffed Grouse" or Chas. F. Kent, but the plume or a pair to my cocker Fannie, for last Thursday, Dec. 2, she caught the king of all grouse ever taken here. It weighed after being carried all day and bleeding considerably, thirty-two and one-half ounces, so, you see, she is fairly entitled to the plume. The bird was weighed on five different scales, and hundreds came in to see it. It measured over eighteen inches from end of beak to end of tail. It was a cock. J. OTIS FELLOWS.

WILTS of Singapore, *Mal.*, Dec. 6.—I notice in last issue of *FOREST AND STREAM* a correspondent awards the plume of honor to Chas. F. Kent of Monticello, New York, and to "Ruffed Grouse" of Ashfield, Mass., for killing a ruffed grouse that weighed one pound and thirteen ounces. If your correspondent will take the trouble to refer to "Frank Schley's American Partridge and Pheasant Shooting," on page 180, he will there find recorded that the average weight of the American ruffed grouse is one pound six to thirteen ounces. To give credit as far as I know this is the only work in the United States that gives the weight of this wild, hardy North American game bird. So, according to this valuable and estimable book, and authority's good teachings, for a sportsman to kill a ruffed grouse that will weigh one pound and thirteen ounces it is not outside of the general

limits of occurrences, but it is otherwise. It is more like the regular, every day run of things. HARRY WOODLAND.

THEY KNOW THE SEABOX—*Bloombury, Hunterdon Co., N. J.*, Dec. 6.—The month of November is past and we have done but very little shooting. Quail are not so plenty as they were thought to be during the summer. We could often find full coveys and many of them, but with Nov. 4, they disappeared and about Jan. 1 will again put in an appearance. Last fall I knew where there was a covey of twenty-four large birds, and hunted them every week, but never found them. I knew no one else had found them, and was confident that none had been shot. On Jan. 4 the whole flock passed across the road and ran along without fear of being molested. Grouse are in fair numbers, although few have been shot. Rabbits are plenty. Woodcock very scarce. We had very bad weather during July and August, or I think would have seen a few at least. About a dozen have been shot in this vicinity since Nov. 1. P. H.

THE HEN ISLAND CLUB—*Taunton, Mass.*, Dec. 7.—The following is the score made by the Hen Island Club, located at Seadings Pond, Taunton, Mass. The club were fortunate in bringing within shooting distance all the geese that struck the pond, thirty-eight in number, and captured at different times 6, 7, 8, 4, 6 and 6—total 31. The pond froze up Nov. 20, and the last six geese were decoyed to the ice forty-six yards from the stand and shot where they lit, a Colt 12-gauge gun killing one clean at that distance. The club use fourteen geese decoys. Ducks this season have been scarce and hard to decoy. Total of river ducks, 61; sea-fowl, 72. The club still remain at the stand waiting for stray flocks of geese, and pass the time in fishing and gunning in the woods. C. T. S.

GEORGIA—*Elberton*, Dec. 10.—Mrs. Oliver and Hafer, of our town, went out hunting a few days ago and bagged 60 partridges. We have several fine shots who bag from 50 to 100 in one day. Ducks, geese, fish and rabbits are plentiful. Deer, foxes and "coons" are scarce. Willie Snow, one of my friends, caught last spring three catfish, respectively 26, 26 and 37 inches in length, and the three weighed 24 lbs. We killed about the same time a bird of the fish-hawk tribe that measured 7 ft. from tip to tip. His bill was 9 in. in length, 1 in. in width, and his longest tail feather was 20 in. Can you tell me what its name is in your next paper? W. A. J.

Your description is insufficient.

OHIO—*Franklin*, Dec. 3.—Quail and rabbit shooting now in full blast. Snow is going off and it will be good hunting for a while. Some very good bags have been made. A few pheasants have been bagged within a mile of town. A friend showed me a very large spine bird this morning. This was the first killed in this county for some years. Mr. Win. Van Horn killed three turkeys and twenty pheasants in Dark County last week. A very fine deer was received to-day by Mr. James Barklow from the wilds of Michigan as a present. It weighed 100 pounds and pulled 80 pounds with hide off. It excited the curiosity of the people very much, being very rare game in this gulch. C. A. M.

CONNECTICUT—*Madison, Conn.*, Dec. 6.—Have been much interested in reading editorial in paper November 25 in relation to farmers on Long Island. The same arguments will apply here as elsewhere. If I can get time and some relaxation from professional cares I intend to give you some information in relation to sporting mammals in this vicinity, for if some measures of prevention are not soon taken game here will soon become extinct, as pot hunters and trappers have full swing here. Please answer the following query: Who makes the best glass-bait trap, and at what cost? and oblige D. M. W.

TEXAS—*Indianola*, Nov. 30.—For the past two weeks the weather has been so wet and cold and everything so full of water that the fewest all the fowl have left here. I fear, however, that up in the Post Oak country (there being an unusually heavy mast this season) the ducks are in countless numbers. I hope, however, to have better news if we can have some dry weather. Fine fishing, large quantities of sheep-head being caught. G. A.

A BIG BOOK—*East Saginaw*, Nov. 29.—I have just returned from a five weeks' hunt. Grayling fishing good. Deer lungs good. I shot hares to every deer; so much for the gentleman sportsman. Killed one buck weighing 247 lbs., and a number of smaller bucks. If you can oversize that I know where there is one that will weigh over 300 lbs. I will try and get him next time. TRAPPER.

PENNSYLVANIA—*Coopersburg*, Dec. 6.—I returned home from a two weeks' hunt in Forest County last week, but cannot boast of success. Mr. J. E. Venk, editor of the *Forest Republic*, killed within a few miles of Tionesta a very fine fine pronged buck which weighed near two hundred pounds. Very few deer killed in that vicinity this fall, owing to the scarcity of snow. I did not see a deer. OTTO.

WEIGHT OF SQUIRRELS.—I have taken the trouble to carefully weigh all the gray and black squirrels I have shot this fall, and find the average as follows: Gray, 1 lb., 10 oz; black, 1 lb., 14 oz. This is not weight, soon after being killed. It seems to me that squirrels here are larger than I ever found them elsewhere. Will some one else please give average weight? Last week I shot three mallard ducks that averaged 3 1/2 lbs. each. J. F. L.

NEW YORK—*Hornellville*, Dec. 5.—Chas. Margeson and three friends returned from a month's hunt in Michigan with seventeen deer. They have enough jerked meat to last a year, and antlers enough to stock a museum. Geo. Humphrey shot a fine deer here the 29th ult. John P. Smith and Frank Morris shot the best bag of ruffed grouse of the season on the 14th ult., eighteen, with thirty shells. J. O. F.

RHODE ISLAND—*Newport*, Dec. 9.—There is nothing to report in fishing, and but very little shooting has been done here the last two weeks. Birds very scarce. Mr. Chase and Mr. Anthony each shot a wild goose. They were lone birds, none others having been seen for some time. X. Y. Z.

The views of Mr. Pike respecting the game law are worthy of a careful reading.

THE *FOREST AND STREAM*'s exposition of "Dittmar sporting powder" will be sent upon application.

TILE CHASE: ITS HISTORY AND LAWS.

BY THE LORD CHIEF JUSTICE OF ENGLAND.

[Continued from page 375.]

AN account is given by Xenophon of the nature and habits of the hare, which even a naturalist might study with advantage, and in the course of which the author appears to be worked up to an enthusiastic admiration of the creature, the destruction of which is the very subject of his work. "So charming an animal is it that no one who sees it either tracked, found, followed, or caught, but must lose all thought of all else he cares for." Various directions are given for the construction and use of the different nets, and for the breeding, choice and training of the hounds, which he divides into two sorts, one of which he ascribes to a cross between the dog and the fox, and of which he speaks with contempt; the other, which he calls the Castor hound—as being the breed with which Castor himself used to hunt—and of which a detailed description is given—probably the Spartan or Cretan hound, which would seem to have been of the same or a very similar species.

Xenophon next treats of stag-hunting, for which he recommends the employment of Indian hounds, as being large, strong, swift and high-couraged, and so best suited for work. But he proposes to pursue the sport in a way which would seem highly unimportant. He recommends the use of a footsore—a sort of wooden trap, the construction of which is not very easy to understand or explain, but which the Egyptians appear to have used centuries before, and which Sir Gardner Wilkinson tells us the Arabs use to this day; this contrivance a mouse is to be attached. When complete, the trap is to be placed in the track of the deer, below the surface of the ground, and carefully covered over with earth and leaves, so that, stepping on it, the foot of the deer may be caught, and the animal, unable to disengage it, may be compelled to drag the wooden log after it. Coming afterward with his dogs and finding the trap gone, the hunter is to follow the track which it will have left on the stones and ground, and with the aid of his hounds will soon come up with the deer, which, its progress thus impeded, will fall an easy prey. Not but what, if it proves to be a stag, Xenophon advises that it should be approached with caution, as the animal can strike furiously both with horns and feet. It should therefore be killed from a distance with darts and javelins.

It is remarkable that Xenophon makes no mention of the use of the bow. Nor in treating of hare-hunting does he speak of the spear, which as we know from other sources, the Greek hunter used with effect to knock over the hare when he could get within reach of her.

The third form of hunting treated of by our author is that of the wild boar, which, as described by him, was of a formidable nature, and the preparations for which required to be of a corresponding character. The nets must be of greater strength. The heads of the javelins used by the hunter must be broad, and sharp as razors, the shafts must be of hard wood. The spears should have an iron head, five paces long, strongly guarded by cross-bars. And the prudent advice is given not to hunt alone, but always in company. The hounds should be, not of a common sort, but Indian, Locrian, Cretan or Spartan. A Spartan hound, these hounds having apparently been remarkable for keen scent, is to be first employed to find the boar, the rest being carefully kept back.

Generally speaking, when found by a single hound, the boar, Xenophon tells us, does not condescend to rise from his lair. The hunters are then to take advantage of this to spread the nets around him; having done which they are to set the hounds on him, but, if possible, at sufficient intervals to allow him to pass between them, so that he may not kill or injure more hounds than can be helped, the object being to get him entangled in the nets, in executing which the hunters are to assist by shouting and throwing darts and stones at him. When he is well entangled in the net, one of the boldest and most skillful of the hunters is to attack him with his spear—spears of this operation, however, which requires great dexterity and care. The blow is to be struck with the right hand, while the spear is supported by the left. But in this dangerous sport hunters, as well as hounds, sometimes perished. We betide the hunter if the boar, by turning his head, should succeed in averting the stroke, and should knock the spear out of the hunter's hand. Great and imminent is then the danger. The only resource of the hunter is said to be to fall flat on his face and endeavor to raise him with his tusks, in order to rend him there, and, if he fails in this, will trample on him, and possibly trample him to death. The wild sow, being without tusks, will always, under such circumstances, endeavor to trample on the prostrate hunter. The peril can only be averted by some bolder sportsman coming to the rescue and attacking the beast with his spear, and so diverting its fury from the fallen man. But this must be done with caution, lest the spear thrust at the boar should injure the man whom it is intended to protect. Many hunters as well as hounds, Xenophon tells us, found their death in this perilous amusement.

Lions and other beasts of prey were destroyed, Xenophon proceeds to tell us, as they could not well be hunted in these mountainous districts owing to the roughness of the country, by means of acornite, as poison, mixed with the food they liked, and placed near the water or other places they were in the habit of frequenting. Sometimes they were caught in pitfalls, a sheet of net being tied to the apex over which the beast had to pass, to attract him by her cries. Sometimes the animals, coming down into the open country by night, were then surrounded by men and horses, and taken, not without danger to the hunters.

Xenophon concludes his interesting treatise by an eloquent but somewhat exaggerated eulogy of hunting. According to him, the chase is the source of health to the mind as well as to the body. It makes men strong, hardy, active, fit for labor, manly, bold, courageous; it prepares men to die for war and for their country's service; it diverts them from mischievous and demoralizing habits and pursuits, and, giving a healthy tone to the mind, tends to make men virtuous and happy.—*The Nineteenth Century.*

SHOOTING MATCHES.

VINCENOWS, N. J., Dec. 1.—The Coaxen Glass Ball Club of this place held their monthly shoot for badge here to-day. Card's rotary trap, 18 yards, weather cold, stormy and disagreeable; 10 balls each; score as follows: V. S. Hilliard, 7; J. W. Haines, 5; H. E. Haines, 5; R. H. Iick, 8; S. S. Butterworth, 4; Capt. Haines, 8; P. S. Hilliard, 6. Capt. Haines won badge. SHELDRAKE.

RUNNENBERG, N. Y., Dec. 8.—In a match between a gentleman of Rhinebeck and a member of the Rhinebeck Club, the latter to

break 24 balls out of 25 from a Card revolving trap, 19 yards rise, 6 balls from three notches and seven from last notch. The latter won to-day by breaking 25 balls straight. P. J. M.

NEWTOWNS, L. I., Dec. 10.—The third monthly contest of the Audubon Gun Club for the club-badge, took place yesterday. The cold accounts for the score not being up to the mark. Eight members participated in the match, who shot at ten balls each sprung from rotary trap, twenty-one yards rise; ties were shot off at three extra balls each:

S. Blackwell	0	0	0	1	1	1	1	0	1	6
James Henning	1	1	1	1	0	1	0	1	0	7
Dr. Talbot, 29 yards	0	0	0	0	1	1	1	1	0	5
L. B. Field	0	0	1	1	0	0	1	1	1	6
Robt. Allen	0	0	1	1	0	0	0	0	1	2
C. W. Field	0	1	1	0	1	1	0	1	0	7
Henry Eger	0	0	1	1	0	0	0	1	1	4
P. Phillips	0	0	0	1	1	0	1	0	0	3

In shooting off the tie between the two highest contestants, Mr. James Henning won the badge. H. HENSTER.

POINTAIN GUN CLUB.—At the last monthly match of the Pointain Gun Club the members shot off the postponed ties of their Thanksgiving match, the contestants appearing being Messrs. Cherry at 25 yards and Schworer at 29 yards. The score was: Schworer, 15; Cherry, 12. For the badge shoot, 7 birds each, 22 contestants. Harry Miller had provided a fair lot of birds, some good drivers rising from the traps occasionally. Among the half dozen contestants who killed six birds each was Madison, the gunman, who, unluckily, had a hard bird on the sixth shot which fell dead out of bounds. Madison shot at thirty yards rise. At the close of the shoot at the seven birds it was found that there were four ties, the score being as follows:

Wingert, 30 yards	1	1	1	1	1	1	1	1	1	10
Dr. Talbot, 29 yards	1	1	1	1	1	1	1	1	1	10
Schworer, 26 yards	1	1	1	1	1	1	1	1	1	10
Van Staden, 22 yards	1	1	1	1	1	1	1	1	1	10

This left Secretary Wingert the victor for the day. The shooting was from five traps at handicap rise.

ALGOONQUIN GUN CLUB, Dec. 6.—Semi-monthly shoot for a gold badge, 20 balls, 3 traps, 18 yards rise:

Jos. Hanna	0	1	1	1	1	1	1	1	1	0	11
Jos. Dunneith	1	1	1	1	1	1	1	1	1	1	11
W. H. Hill	1	1	1	1	1	1	1	1	1	1	11
L. Brenner	1	1	1	1	1	1	1	1	1	1	11
Geo. Williams	1	1	1	1	1	1	1	1	1	1	11
R. N. Burns	1	0	0	1	1	1	1	1	1	1	10
Thos. Longhery	1	1	0	0	1	1	1	1	1	1	11
John Male	1	1	1	1	1	1	1	1	1	1	11
P. E. Burns	1	1	1	1	1	1	1	1	1	1	11
Robt. Old	0	1	1	1	1	1	1	1	1	1	10
H. Griswold	0	1	1	1	1	1	1	1	1	1	10

H. M. R.

The Kennel.

CANINE OPINIONS.

HEARD IN THE STILLY NIGHT.

IT was night. The Eastern Field Trials were over. The great "go-as-you-please" for judges and reporters was at an end, and quiet reigned supreme. The sound of Tom Aldrich's voice pleading for "just one more twenty-five cent bid" was no longer heard in the land. The room was deserted, and only the empty bottles and a floor strewn with cigar stumps spoke that all but one that was human had at last sought a bed of rest. As I yawned and stretched out my arms, disturbing the clouds of stale tobacco smoke that hung heavily over where the battle had so furiously raged, I felt more like conquered than conqueror and made up my mind that before donning my slippers and slipping in between the chilly sheets, a turn in the lane would do me good. No sooner thought than done, and the frosty road soon gave back the echoes of my square-heel-and-toe. I had just got under full swing, discussing the problem of how many meals of scallops a single man could make before going to Heaven, when a strange murmuring sound brought me to a stand-still. A queer mumbled sound as if it came from human voices hidden in some crypt beneath the earth. A moment later I heard the word "Judges" spoken distinctly in half a dozen dialects, and then a howl went up that drew my attention to the barn where the dogs were kept.

"Great Lucifer," I said, "can it be possible that even the dogs have fallen to sitting up and talking the matter over?" That there was anything strange in the dogs having acquired the power of speech did not for one moment occur to me, for incessantly during one week I had heard such wonderful stories narrated of the intelligence of each individual dog that I was fully prepared for anything that might happen as far as canines were concerned. My hat, therefore, did not pole on the ends of my luxuriant locks, but the burning of my left ear warned me that some one was talking about me. Now, although curiosity is generally summed up among the long list of virtues belonging exclusively to women, yet I have known just as many men who have had a sneaking desire to know what was going on. So, silently, I crept up to the barn and applied the heated organ of hearing to a crack, just in time to catch the words of Iron Duke, who for the time seemed to have the floor:

"You see, it ain't a square deal. I've been spilled in gittin' ready for these 'ere dun trials. They'll spill any good dog. The judges, did you say, Glad? Well, that caps it. No more trials on my plate. When a feller gits in two heats to be downed by a duffer like Glen. That siffs it down. I know it all. It was a set up job and fixed beforehand. I'm done, bust up, when I ought to be a winner."

"A winner?" said Gladstone, "you'd be a healthy winner lot me and Whit, alongside. It would take a right smart lot to get away with us. I don't reckon we came East to lose. A winner? Well I s-h-o-u-l-d s-m-i-l-e. Wouldn't we, Peep?"

"He! he! so we would, Pa," uttered Peep O' day.

"Ear me hout," said a gruff voice I knew at once as com-

ing from Croxteth, "it baint smellers I'm takin' 'bout, but *hoojers*; did you see the swell chew the birds? That's what I calls too bad, 'thouds he be from same country and kind of related loike. I tolds no such blarsted swell no pal o' mine. His hails rot for 'im to 'ave a place; and, Lass, you 'ere me tell you straight."

"That's too most awfully unkind to scold poor dear Sensation so," says Lass, "and although he is no kin of mine he is so charmingly picturesque."

"By jove," chimed in the champion pointer, with a yawn. "By jove, yes; on the bench I am called 'handsome Sensation,' but here I am called 'bloody Don.' With a few exceptions this crowd is quite too low for me. I don't mix with these kind of fellows at home, you know. In fact, if I met them in the street I wouldn't even wag my tail!"

"Picturesque be blowed," growled Croxteth. "Any crow but that has knobs 'long his back loike bell handles to a tiniment house," says Raleigh.

"He thinks he's a masher," says Trim.

Here a very feeble voice was heard saying, in a squeaky tone, "That's so," which I recognized as coming from Jennie II.

"Thin judges," says Spy, "hain't got no appreciation. I made the best pint of all of 'er. I struck a schent right through old Duke, and thin they wint and pinalized me. And thin reporters! Oh! begorra, what a gang. That Gladstone man with the bow-legs, which he says he got from ridin' to hounds too much when he was young, and that young Jersey ruster with the red beard, the slaughters. Why don't yer say somethin', Nat? Smut and you have a right to squeal."

"It's money that talks down our way," says little Nat, "and if we had 'em there it would be a different racket. They'd ought to see little Smut and me on ruffed grouse; it would make them sick. We ain't over-much on style, but we make up in nuge. It ain't style that fluds birds, it's nose, and when we come to a point it ain't no blue-blood point, with the tail wiggle, wiggle, wiggle, but we stiffen out our tails stiff and solid, as much as to say, 'Boys, come up and have a shot; we've got 'em!'"

"And you bet that's the way to point," says Grouse Dale, a Down Ender, too.

"Law!" says Isabella, of whom no one had taken any notice, "don't he talk sweet?"

"He is the boss talker," says Glen, "and he ought to protest against this foul and most unnatural outrage."

"Indeed he should," said pretty little Bessie, "it's a burning shame, because Nat and Smut are small, that they should be set on."

"Shake," says Nat to Glen; and shake they did.

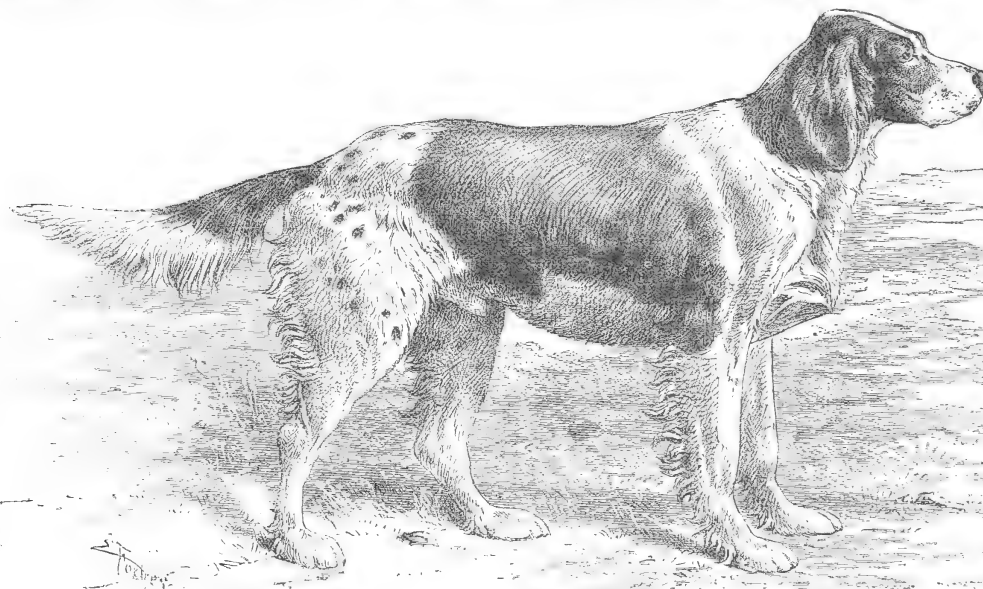
PEN PARAGRAPH.

"MY EXPERIENCE WITH SETTERS."

FOR a long time I have been waiting for some practical sportsman to tell, through the papers, his and the general experience with setters as bird dogs, going into the details, which in this are so important, and leaving the glittering generalities to those who have in them an interest in not descending to particularize—or who do not know enough about it to do so—feeling confident that his experience would coincide with mine and save me the trouble of telling my story.

To begin with, I would say that I shoot only for pleasure, and breed dogs only for sport and because I love them, never having sold a dog in my life. From my earliest recollection I have been firm in my love for bird dogs. Long before I could carry a gun I have, I say, after day, ridden behind my uncles, who were ardent sportsmen and fine shots, and held their horses when the dogs would stand, while they shot the birds; and from the time that I was considered old enough to be trusted with a gun I have been the owner of a bird dog and spent a part of each fall in pursuit of quail, or partridge as we in Virginia call them.

When I can first remember, my uncles had a breed of liver and white pointers—descended from stock imported by the Randolphs of Cumberland and the Hoopers of Buckingham—large, strong dogs, with grand heads and long muzzles and hair as short as the modern breed, but coarse and harder to the touch, which were infinitely superior to any dogs I have ever seen. They were remarkably fast and capable of hunting every day for weeks; but the most remarkable thing about them, and the all-important thing in a bird dog, was nose, which enabled them to hunt always for the body scent, never stooping to foot or pottering in the least; and they never false-pointed or failed to exactly locate their birds. Most of them were taught to tree squirrels, and so inherent was the disposition to hunt with head up, and for the body scent, in them, that they would run through the woods at full speed and stop instantly, throw up their heads and bark without ever putting their noses to the ground or regarding the squirrel's track in the least, but sniffing the animal itself in the tree. We managed to keep this breed more or less pure until since the war, and in 1871 I became the owner of the last of the blood in this country, a bitch some eight or nine years old, but showing even at that age all the characteristics of the breed, including retrieving, for which they were also noted, for with them a dead or wounded bird was never lost. Not knowing where to find a mate for her I lost the stock. About this time, from reading the sporting papers and dog books the rage which was sweeping over England and this country, and nothing would do for me but a high-bred setter. Just then I met in the cars a gentleman from New Jersey returning from a shooting trip up the James River valley, who was equipped with a fine breed-loader and brace of slashing setters, and full of all the new kinks in the sporting world. From him I purchased a cross-bred Gordon and Irish setter. "Don" was a red dog, very handsome and large. He was fast enough, but had no nose and pottered and false pointed inveterately, and was worn out at five years old. From what I could learn from the sporting authorities, I concluded that the fault was in the cross of the two breeds, and the thing was to get it perfectly from Irish



J. C. HIGGINS' DASHING MONARCH.

DASHING MONARCH.

DASHING MONARCH is owned by Mr. John C. Higgins, of Delaware City, Delaware, and is a powerful young white and black setter dog. He was whelped August 25, 1878, and was bred by Mr. R. Llewellyn Purcell Llewellyn at Ormsby Hall, Lincolnshire, England. His sire, Dash II., was the most noted field trial winner in England. His dam, Countess Moll, she being by the celebrated Dan out of the equally celebrated Countess. Dashing Monarch thus combines the blood of the greatest dogs yet produced. He was imported last November a year, and arrived here on December 5, 1879. In the field Monarch has just shown what stuff he is made of, as winner of second in the All-aged stakes, and he has before him a grand future both in the field and on the bench. Considering that he has had but two months work in his life, he is a most excellent dog. The picture of Monarch is a grand one, and we had the pleasure of submitting it to Mr. Higgins, who regards it a "a speaking likeness."

Gladstone, the winner of first, is a son of Mr. Higgins' Petrel, a noted champion Laverack, so that, directly or indirectly, both first and second prizes in the All-aged stakes fall to the honor of Mr. Higgins' kennel. Besides other noted dogs Mr. Higgins owns Fairy II., the last exportation of Mr. Laverack to America. She is the dam of Mr. Snellenburg's Thunder, a dog which has done exceedingly well at this year's field trials at Lancaster, Pa.

EASTERN FIELD TRIALS.—We take great pleasure in presenting to our readers this week very excellent portraits of two of the winners at the late Eastern Field Trial Meeting. We have certainly spared neither trouble nor expense to give correct likenesses, and in order to do this we secured the best artistic talent. The sketches were made by Mr. E. Forbes, of this city, who has for years given his entire attention to the illustration of live stock. Both of the pictures, therefore, have been taken from the animals themselves, not from photographs or paintings, and each dog was given a careful stand or sitting.

By an unfortunate mischance the plate from which our picture of Champion Gladstone, winner at Robins' Island was to have been printed, was ruined just before going to press. We are, therefore, obliged to wait until next week before giving a portrait of that celebrated dog.

In our next number, also, we will publish the portraits of Mr. Max Wenzel's Chief and the Westminster Kennel Club's Sensation.

NOVA SCOTIA KENNEL CLUB.—The inaugural meeting of this association was held at Halifax, N. S., on December 1, when a Constitution and By-Laws were adopted. The committee reported that His Honor the Lieut. Governor had consented to become the patron of the club, and that His Worship the Mayor had accepted the position of President. It was decided to hold a dog show in the last week in February. In our next issue we will give full particulars.

Dr. Wm. Jarvis and Mr. Benj. F. Clark, returned last week from McKeen's, Tenn., where they have been enjoying fair quail shooting since the Vincennes trials. Noreen, Dr. Jarvis' last importation, is said to be as good as shelducks, and took to her work most kindly.

WHAT IS A COCKER?

CORTLAND, N. Y., Dec. 5.

Editor Forest and Stream:

As an admirer and breeder, on a small scale, of cockers, I am interested in the formation of a club and giving to breeders an admitted standard of excellence, that all owners and purchasers can then judge for themselves the merits of their stock.

As for myself, I would like to approach as near a sensible standard by careful breeding, mating, etc., as is possible. If I am not now upon the right track I will go back and take a new start, as I have made a choice of this variety and feel at a loss how to know the points to breed to that will make my dogs desirable and give them the greatest advantage at a bench show. It seems to me the cocker should be bred to a standard that will not sacrifice him in any respects as a field dog. Make the disqualifying weight of cockers such that good, strong, eligible dogs in all other respects would not be thrown out by being a trifle over size.

I wish to conform to the cocker size and weight in breeding, but for an all-day's hunt in the thick cover and over fallen timbers the small toy dogs will not fill the bill. Pardon me if I am trespassing. I claim only to be an amateur, but being a lover of the cocker spaniel I have my ideal, like many others.

I only hope a standard will be made by a corps of men that are both fearless and unselfish, not allowing their own or friends' favorite strains of cockers to have an undue influence upon them in making this standard. It seems to me that a fair way to begin this is for all breeders of experience and those who have taken pains to make this variety a study to furnish the committee a description of the cocker spaniel, as they understand it to be.

The articles which have appeared from time to time in your paper have all got some good points, but the soundest and best and most business like is from your Ann Arbor correspondent "Senex;" his idea exactly covers the case, and in this way of selecting a committee no one individual can feel aggrieved, and I will cheerfully donate one dollar to defray expenses. I also like the suggestion of "Shamrock," Chicago, Ill., with respect to the \$50 prize, and I will freely contribute to such prize. But, "Shamrock," in regard to weight I don't agree with you. Pray what is a field or springer spaniel if a dog weighing 40 lbs. is to be called a cocker? I have seen cockers and field spaniels both on the bench and in the field in England, Wales, Scotland and Ireland, and have seen what they call a spaniel in France, but I have never yet seen what they call a spaniel that weighed over 45 lbs. Just look at the weight of winning cockers at bench shows both in England and America. I think you will find them under 30 lbs. McKoon admits and I concede that a cocker is to all intents and purposes a small field spaniel, but yet a cocker proper has a far better coat, a brighter color, finer hair, more silky in texture and a far handsomer head than the field or springer spaniel. And I think it is generally understood by cocker breeders that all those finer traits, such as color, size, shape, eyes, ears, legs and general make up, come from the King Charles, so that properly speaking a cocker is not a small field spaniel, for aside from size the build of the two types widely differ. Now, again, the weight question. I have owned, bred and shot over spaniels for over twenty years, and I have yet to see the dog at say 40 lbs. that can do any more work or any better than one at 25 lbs., all other things equal, such as health, breaking, etc., with the single exception of duck retrieving; and for woodcock and ruffed grouse shooting in thickly matted covert, the smaller dog has a decided advantage. As for speed they are all fast enough, and are apt to be too much so, at least this is my experience. And now, Mr. Editor, let us have the committee proposed by "Senex" elected, and I would suggest to such committee to take Stonehenge as their guide, and I for one will be more than satisfied.

Franklin, N. Y.

ROBERT WALKER.

In your issue of Dec. 2 you give quite a number of letters on this subject, all of which refer to me more or less directly and some of which call for an answer. Mr. McKoon has a good deal to say (as usual), and I would like to see exactly what there is to the purpose.

Modern cockers have been "an established breed for between fifteen and twenty years." Established by whom?—by Mr. McKoon, I presume, who has a little way of denying every dog the name of "modern cocker" unless bred by himself. Well! he is welcome to the name, for simply "spaniel" will do me as well.

Would it not be absurd to restrict a cocker to a certain weight, when they are better to vary in size as they do at present? Now Mr. McKoon is getting off the track, for exactly what we propose to do is to let them vary in size more than they do at present, for as it is, a dog of thirty pounds or over stands no chance against one of twenty-four or twenty-five. Is any pointer penalized for his size? Do not pointers weigh anywhere from thirty-five or even thirty pounds up to seventy and eighty, and in one instance (if I am correctly informed) 120 pounds? And are not pointers divided into two classes, large and small? I will venture to say that there is no breed in which there is more latitude as to size than pointers, and there is no breed that needs latitude as to size more than the cocker, or field spaniel, for the very reason that Mr. McKoon states, viz., that different parts of the country need different sized dogs.

What we mean by its not being necessary for a man to own or breed cockers to be eligible for our club, is that many admirers and judges of cockers do not happen to own specimens, as is the case with "M. B.," though I hear that he intends getting some.

Because I do not happen to own any setters is that any reason that I should be debarred from a club having their improvement for an object, or that I should not be a good judge of the breed? Things would come to a pretty pass if every judge at a show should be obliged to own specimens of each breed he undertakes to judge.

Many thanks to Mr. McKoon for his kind opinion of the "highly respected and enthusiastic young man." My youth does not prevent me from knowing a little about dogs, for "age does not always bring wisdom"—more's the pity.

Now, in his next statement, "Such a club as this is intended to work to the advantage of certain parties," I beg to flatly contradict him. With the exception of Mr. McKoon (who knows which side his bread is buttered on too well) every breeder, owner and exhibitor of cockers will reap equal advantages in having competent judges, a clearer idea of what is a cocker and better divided and larger prizes given by the club.

Mr. McKoon insinuates that my dogs are not cockers by the following sentence: "But his experience is very limited in relation to cockers, and he has only bred a few spaniels of any kind in the short time he has given any breed of spaniels his attention." The only cocker I have, I suppose, is Madcap (black), by Dorn out of Black Bess; Dorn by McKoon's Captain out of his Caper. Well! if Shell, Doctor, Cora, Flirt II., Black Bess, Beauty and others are not cockers I am content to call them simply spaniels, or, if you like, field spaniels, but this I know, that they fetch higher prices and have won more prizes (those that have been exhibited), under competent judges, than any one strain of spaniels in America.

Mr. McKoon again insinuates that Cora got more than her deserts at the last New York show. As she was an undeveloped puppy, just one day too old for the puppy class (had she shown been held on the original date), perhaps she did, but the judge said she was worth the other thirteen bitches put together, and there were two if not three of the McKoon strain there.

I suppose that the only competent man to establish a "competent rule"—who can reckon on the "co-operation of all cocker breeders in the U. S.," the great "I am" of the cocker world—is Mr. McKoon himself. Perhaps so, but if he does not choose to join our club there is still a small chance of its surviving, notwithstanding the overwhelming obstacle of his opposition. I am sure "all cocker breeders



D. S. GREGORY, Jr.'s, BELLE.

in the U. S. await with the greatest anxiety his "few lines on the breeding, rearing and breaking of cockers," but I doubt if they will convey the amount of "pleasure and benefit" which he seems to anticipate.

I have to thank "Shamrock" for his letter, which is such a contrast in its liberality and pertinency to the preceding one, and will gladly put the "Lachine Kennel" down for a like amount toward a special prize, though that comes more properly within the province of the club.

To "Senex" I will say that the only reason for my accepting the secretaryship *pro tem*, was in order that interested people might send me their names so that a list could be made of those to whom to send just such circulars as he suggests. How else are we to know to whom to send them? And FOREST AND STREAM is doing quite enough in giving us space without their going to the trouble (which I am willing to undertake) of compiling such a list.

I am much obliged to Mr. Fellows for his letter, and what he says is to the point.

To "M. B." also thanks are due for the letter from his friend, which is more exact (according to my humble opinion) than anything I have seen yet.

To "Cocker" I would say that we do not and did not intend to call a meeting now, but wished to get things in running order before the next New York show, during which show it would be best to hold the first annual meeting, as there would be more cocker men collected then than at any other time.

I find that I have got into this "cocker standard" business much more deeply than I intended, and will be better pleased to be in future referred to not by my name, but by my *nom de plume*, which I suppose is well enough known, of

Ruabeth, N. J.

DIDO.

FRANKLIN, N. Y., Dec. 4.

Editor Forest and Stream:

Have just read the several interesting letters in last issue of FOREST AND STREAM on the cocker question, which is so agitating the minds of the bench show class of cocker men at present. It seems to me as if "Senex," from Ann Arbor, has suggested a mode that appears the most feasible of any as yet presented to get at the matter, and in an easy, correct and satisfactory manner both to the breeders and those directly interested and to the breed itself, and should no better way be presented very soon I think it would meet with the approbation of all breeders and earnestly interested ones for the welfare of this breed. I do not say all intending exhibitors, however, as it never would be settled to their satisfaction it is evident. But should it meet with the approval of such breeders as P. F. Pitcher, Chas. Aden, C. B. Cummings, J. H. Whitman, Burr Hollis, Fred. Hoe, George D. Macdougall and others who look the matter calmly in the face and for the best interest of the breed and its future welfare, it will certainly meet with the approval of myself as well, provided, of course, that FOREST AND STREAM faces in to line with such assistance as is necessary to properly facilitate it; the expense of which I can assure you will be cheerfully canceled by the cocker men whose shoulders are at the wheel in this matter. Such circulars should need to be sent out, I should think, through the several sportsmen's journals of the land in order to reach all interested ones in the United States, and the committee of these chosen to make the standard should call through the sportsmen's journals for postal cards views to show what their ideas of a proper standard is, and then this committee should carefully peruse these views and make a standard which ought to be accepted, of course subject to various amendments as time might reveal it to be advisable for its benefit, etc. As to color, any color belonging to the spaniel race should be eligible. Should this plan meet with the approval of others, and also your co-operation, further comments upon the various late letters published would of course be unnecessary.

M. P. McKeown.

A FINE STAFF—Mr. D. A. Smieton, Cranford, N. J., has just returned from England by the steamer *Circassia* of the Anchor Line, which arrived in this port last week. Mr. Smieton brought with him a very handsome young mastiff, Zulu, by Champion Colonel, out of Diana; commended at the late Dundee Show. Zulu has a remarkably short head, and, in this respect, is a great improvement on most of the dogs that are benched in this country. The Dundee Show was declared by the judges to have an unusually fine class of mastiffs this year.

BELLE.

BELLE is owned by D. S. Gregory, Jr., of this city, and is a very handsome, clean-cut lemon and white pointer puppy of eleven months. She is by Sensation, out of Mr. Luke W. White's Champion Grace; she by Match out of Nell. A full pedigree of the sire and dam of Grace cannot be given at this time, but a letter from her owner, Mr. White, may prove interesting: "I have just written to the owners of Match and Nell for full pedigrees of both dogs. I think it will take time to get them, as the breeder of Match lives in England. About seven years ago I went to live at Plymouth, Conn. I saw then for the first time Match, a large handsome lemon and white pointer dog, with a head something like Sensation's. Mr. Oliver Bryant, the owner, let me shoot over him. He was a grand field dog, head up, fine nose and style. I spoke to Mr. Wm. Morton, the then owner of a black and white ticked bitch known as Fern's Nell. She was bred in Litchfield, Conn., from imported stock. Nell was famous in that part of the country for field qualities. The cross was agreed upon and my little Grace was the choice of the litter. I knew Grace would breed well to Sensation on account of his grand head." Belle cannot be too highly spoken of as a field dog. She is one of the best we have ever seen of her age. She easily secured the first prize in the Nursery stakes, and in the Puppy stakes fourth prize.

THE RUSSIAN SETTER.

[Reprinted from advance sheets of Yero Shaw's "Book of the Dog," furnished to the FOREST AND STREAM by the author, through Cassell, Petter, Galpin & Co., publishers, No. 596 Broadway, New York.]

ANY book professing to refer to sporting dogs would, we think, be incomplete if no reference were made by the author to the Russian Setter. This breed of dog is unquestionably rarely met with in these islands, but some years ago his appearance made a considerable stir among all followers of the gun. It is certain, too, that his services were in some quarters called upon to improve the English Setter, and therefore, in spite of the dog's rarity in his pure state, it is desirable that he should be treated of in a chapter by himself, though necessarily the remarks concerning him will be very brief.

Mr. Joseph Lang, writing to the *Sporting Review* in 1841, and dating from No. 7 Haymarket, thus alludes to the Russian Setter:

"In the season of 1839 I was asked for a week's shooting into Somersetshire by an old friend, whose science in everything connected with sporting is first-rate. Then, for the first time for many years, I had my English setters beaten hollow. His breed was from pure Russian setters crossed by an English setter dog, which some years ago made a sensation in the sporting world from his extraordinary performances. . . . Although I could not but remark the excellence of my friend's dogs, yet it struck me, as I had shot over my own old favorite setter (who had himself beat many good ones, and had never before been beaten) for eight years, that his nose could not have been right, for the Russians got three points to his one. I therefore resolved to try some others against them the next season, and having heard a gentleman, well-known as an excellent judge, speak of a brace of extraordinary young dogs he had seen in the Yorkshire moors, with his recommendation I purchased them. I shot to them in August last, and their beauty and style of performance were spoken of in terms of high praise by a correspondent to a sporting paper. In September I took them into Somersetshire, fully anticipating that I should give the Russians the go-by, but I was again disappointed. I found from the wide ranging of my dogs, and the noise consequent upon their going so fast through the stubbles and turnips (particularly in the middle of the day when the sun was powerful and there was but little scent) that they constantly put up their birds out of distance, or, if they did get a point, that the game would rarely lie till we could get it. The Russians, on the contrary, being much closer rangers, quar-

tering their ground steadily, heads and tails up, and possessing perfection of nose in extreme heat, wet or cold, enabled us to bag double the head of game that mine did. Nor did they lose one solitary wounded bird; whereas, with my own dogs I lost six brace the first two days of partridge shooting, most or them in standing corn.

"My friend having met with a severe accident while hunting last season, I determined to go to Scotland for the next three years. Seeing that my dogs were well calculated for grouse shooting, as they had been broken and shot to on the moors, and being aware of my anxiety to possess his breed of Russians, he very kindly offered to exchange them for mine, with a promise that I would reserve a pair of Russian puppies for him. . . . Since then I have hunted them in company of several dogs of high character, but nothing that I have yet seen could equal them. If not taken out for six months they are perfectly steady, which is a quality rarely to be met with. . . . I contend that for all kinds of shooting there is nothing equal to the Russian, or half-bred Russian setter, in nose, sagacity, and every other necessary qualification that a dog ought to possess."

Mr. William Lort, to whom we applied for information concerning the breed, writes in reply about the Russian setter:

"Roughly speaking, in appearance this dog is rather like a big 'warm' Bedlington terrier. There are two varieties of the breed, and curiously enough they are distinguished from each other by the difference in their color. The dark colored ones are deep liver and are curly coated. The light colored ones are fawn, with sometimes white toes and white on chest; sometimes the white extends to a collar on the neck. These latter are straight-coated, not curly like the dark ones. My recollection of this breed extends back some fifty years, and the last specimen I owned of it—a light-colored one—I gave away to a friend who would not take a hundred pounds for it."

"Their" noses never seem to be affected by a change of climate; hence their value in my eyes. I have worked them in September's sun and in January's snow, and they were equally good. They were some of the best dogs I ever had, and never varied; and under exceptional cases as regards the weather, we always had the Russians out. The only fault I found with them was the difficulty in getting new blood, for those we had showed evidences of scientific breeding, and a strict adherence to type. The fact that they were successfully crossed, to my knowledge, with English setters, satisfies me that they are really setters and not an allied breed. I may add that they are excellent water-dogs."

A breed so highly recommended by such sportsmen as the above, it seems marvellous that it has not been encouraged in a country like our own, which has been the nursery of sport for years. We cannot, therefore, express too strongly our conviction that the introduction of a dip of Russian blood would improve the working capacities of our English setters. At all events, the experiment is well worth repeating, and we trust that Mr. Lort, or some other gentleman equally looked up to in the canine world, will set the example, and try to still further improve our breed of setters. Unquestionably, the appearance of our dogs would suffer at first, but few sportsmen would regret the loss of good looks if an increase of working capacity was gained.

A scale of points is quite out of the question in treating of a breed of which so very little is known, and for a description of the Russian Setter we must take refuge under theegis of Mr. William Lort.

IMPORTED BELL BITCH.—The steamer *City of Richmond*, which has just arrived in this port, had on board a very excellent bull bitch, consigned to Mr. E. B. Goldsmith, the well-known forwarding agent, of 59 Wall street, this city. The bitch was imported by Mr. R. M. Livingston, of Rye Beach, N. H., and selected by Dr. Gordon Stables for him. Of the bitch Dr. Stables writes as follows: "I consider the bitch a very nice one. Her only fault is that she carries her ears rather high, so that a sire must be selected that has small ears. She has a splendid skull, good stop and nice mouth." The bitch arrived safely and is now on her way to her owner."

A DOG, A CHURCH FAIR AND A RAFFLE.—Trenton, N. J., Dec. 4.—I send you the result of a contest for my Newfoundland dog Duke, held at a church fair in this city. The contest was between two prominent fire companies, and excitement ran very high up to last evening, when it was decided,

Average 80 yards.....	130	7-13
Average 60 yards.....	90	15-31

F. O. Hyatt, Cortland, N. Y.				
York Rounds.				
October 16.	100 yards.	50 yards.	60 yards.	Total.
October 19.	18.	60.	21.	99
October 20.	21.	59.	22.	102
October 21.	28.	100.	23.	151
October 22.	28.	100.	24.	152
October 23.	29.	84.	25.	138
October 24.	30.	100.	26.	156
October 25.	22.	85.	27.	134
October 26.	22.	85.	28.	134
October 27.	15.	57.	29.	111
October 28.	12.	56.	30.	104
24 arrows at 60 yards: 22. 94. 23. 105. 19. 107.				
Average York Round.	22	85	27	81 1-5
Average 100 yards.	22	85	27	81 1-5
Average 50 yards.	22	85	27	81 1-5
Average 60 yards.	22	85	27	81 1-5

Howard Fry, Williamsport, Penn.				
York Rounds.				
October 8.	100 yards.	50 yards.	60 yards.	Total.
October 9.	9.	29.	15.	53
October 10.	7.	21.	14.	42
October 11.	9.	27.	15.	51
October 12.	9.	27.	15.	51
October 13.	10.	36.	16.	62
24 arrows at 60 yards: 9. 41. 12. 60. 14. 46.				
Average York Round.	9	29	15	43 3-4
Average 100 yards.	9	29	15	43 3-4
Average 50 yards.	9	29	15	43 3-4
Average 60 yards.	9	29	15	43 3-4

Winthrop Sargent, Altoona, Penn.				
York Rounds.				
October 9.	100 yards.	50 yards.	60 yards.	Total.
October 10.	10.	30.	17.	57
October 11.	10.	30.	17.	57
October 12.	10.	30.	17.	57
October 13.	10.	30.	17.	57
October 14.	10.	30.	17.	57
24 arrows at 60 yards: 13. 59. 17. 72. 100. 18. 57 (with 15 arrows).				
Average York Round.	10	30	17	57 1-2
Average 100 yards.	10	30	17	57 1-2
Average 50 yards.	10	30	17	57 1-2
Average 60 yards.	10	30	17	57 1-2

Fair skin, rosy cheeks, buoyant spirits and the sweetest breath in
Hop Bitters. See Notice.

The Rifle.

RANGE AND GALLERY.

A CHALLENGE FROM ENGLAND.—No. 20 Grosvenor Place, S. W., London, No. 26, 1880.—SIR: As chairman of the Council of the National Rifle Association, I have the honor to invite the National Rifle Association of America to compete with a team of Great Britain and Ireland next July in an international long-range rifle match. If you are pleased to entertain the suggestion, I hope that I may persuade the American Rifle Association to send over a team of eight gentlemen to represent their country at the Wimbledon Camp-meeting, which commences on the second Monday of July, 1881. The international match could take place about ten days later if convenient, when undoubtedly it would attract very considerable and wide-spread interest.

My object in writing this early is that the Council of our association is anxious that if the match takes place all preliminary details may be fully arranged. I have the honor to be, Sir, yours very respectfully,
STANHOPE.
The Hon. Judge Gildersleeve, President National Rifle Association.

The above letter from Earl Stanhope was received by Judge Gildersleeve on the 13th instant. No action upon it has yet been taken.

DATH, N. Y., Dec. 9.—We had an all-comers' rifle shoot here to-day with some fair scoring done at 200 yards. The record was:

Wm. E. Pritch, Bal. S.	3	4	4	4	4	4	3-26
James I. Miles, N. Y.	3	4	4	4	4	4	3-26
O. Dexter, S. C.	3	4	4	4	4	4	3-26
Wm. T. Miles, S. C.	3	4	4	4	4	4	3-26
S. C. Colburn, Cal. S.	3	4	4	4	4	4	3-26
A. Porter, N. Y.	3	4	4	4	4	4	3-26
D. Taylor, Bal. S.	3	4	4	4	4	4	3-26
R. Saunders, Wm.	3	4	4	4	4	4	3-26
P. Tobin, Bal. S.	3	4	4	4	4	4	3-26
Jonathan Dill, N. Y.	3	4	4	4	4	4	3-26

At the 16th a subscription match will be shot at 200 and 500 yards, with military rifles, 50 per cent. of the entrance money to be paid to the competitors making the three best scores. The match will be open to all comers, with unlimited re-entries.

THE BOSTON GALLERIES.—The new matches at the Magnolia Gallery have proven quite attractive, and both matches have killed well. The best scores are given as follows in each contest; rifle, 100 feet; pistol, 50 feet:

Match No. 1.									
W. H. Farnham.	4	5	5	5	4	4	5	5	47
J. Jones.	4	5	5	5	4	4	5	5	47
J. B. Duffy.	4	5	5	5	4	4	5	5	47
C. Wright.	4	5	5	5	4	4	5	5	47
H. Huns.	4	5	5	5	4	4	5	5	47
H. Bixby.	4	5	5	5	4	4	5	5	47

Match No. 2.									
C. Wright.	4	5	5	5	4	4	5	5	47
H. Huns.	4	5	5	5	4	4	5	5	47
H. Bixby.	4	5	5	5	4	4	5	5	47
P. Clout.	4	5	5	5	4	4	5	5	47
W. Jones.	4	5	5	5	4	4	5	5	47

Pistol Match.
W. H. Farnham. 39
J. Jones. 35
J. B. Duffy. 35
C. Wright. 35
H. Huns. 35
H. Bixby. 35
C. Wright. 35
H. Huns. 35
H. Bixby. 35
P. Clout. 35
W. Jones. 35
At the Mammoth Gallery the any rifle match, which began Dec. 1, has shown, for so early in the month, fine shooting. Milton W. Farrow and J. H. Brown, of the Empire Rifle Club of New York, visited the gallery during the week and proved themselves capital gallery shots. Mr. H. A. Duck, the rifle manufacturer of Stafford, Conn., has also shown good work at this place and capital holding. Mr. J. H. Brown is in the leading position with 187, and was nearly successful in getting the extra prize of \$50 in gold for a clean score of eight consecutive bullseyes. The subjoined summary will show the standing of the several competitors to date, 50 yards, rounds 8, possible 40; five scores to win or possible 200:

J. H. Brown.	37	37	37	37	37	37	37	37	37
J. A. Pollard.	37	37	37	37	37	37	37	37	37
Frank Hollis.	37	37	37	37	37	37	37	37	37
Frank Buck.	37	37	37	37	37	37	37	37	37
Milton W. Farrow.	37	37	37	37	37	37	37	37	37
C. R. Bartlett.	37	37	37	37	37	37	37	37	37
S. Arnold.	36	36	36	36	36	36	36	36	36
A. S. Stubbs.	36	36	36	36	36	36	36	36	36
R. D. Elson.	36	36	36	36	36	36	36	36	36
George D. Armstrong.	35	35	35	35	35	35	35	35	35
R. C. Sawyer.	35	35	35	35	35	35	35	35	35
F. J. Snow.	35	35	35	35	35	35	35	35	35
C. T. Hart.	34	34	34	34	34	34	34	34	34

George Estes. 34
H. B. Furness. 34
The pistol practice has also been lively during the week, and the match which began Dec. 1 is fast becoming very popular, many availing themselves to practice at this favorite range. Mr. Elihu Wilder, the inventor of the Wilder machine gun, has shown good holding with this little weapon; 50 feet, rounds 8, possible 40, three scores to win or possible 120:

Elihu Wilder.	35	35	35	35	35	35	35	35	35
R. F. Scott.	34	34	34	34	34	34	34	34	34
C. A. Barrett.	33	33	33	33	33	33	33	33	33
C. C. Foster.	33	33	33	33	33	33	33	33	33

BOSTON, Mass., Dec. 11.—The cold of to-day was the only objection to sport at Walnut Hill, though to the marksmen in the winter shed it was no objection at all. The weather conditions after 12 m. tempted large delegations there in the afternoon, and the shed was well filled by the devotees of the rifle, who stuck to their work until darkness compelled them to pack their traps. The day must be acknowledged to have been a good one for the sport. The sun was obscured, and the mirage before the butte, which is always encountered on a bright day from the sun's reflection upon the snow, was absent. The wind gave no unnecessary trouble, and was easily handled by the old vets, while the younger marksmen saw "mags" appear for too much to the little wind elevations. Only the best scores are given in all the contests:

Creedmore Match.									
G. W. Frost.	5	5	5	5	5	5	5	5	46
A. C. Bates.	5	5	5	5	5	5	5	5	45
H. Max.	5	5	5	5	5	5	5	5	45
C. B. Prince.	5	5	5	5	5	5	5	5	45
H. A. Gault.	5	5	5	5	5	5	5	5	44
A. L. Burt.	5	5	5	5	5	5	5	5	43
C. B. Cent.	5	5	5	5	5	5	5	5	42

Ring Target (Res.).									
S. Lewis.	12	12	12	12	12	12	12	12	119
J. O. Pike.	12	12	12	12	12	12	12	12	119
J. Nichols.	12	12	12	12	12	12	12	12	119
E. H. Max.	12	12	12	12	12	12	12	12	119
W. R. Schaefer.	12	12	12	12	12	12	12	12	119
G. B. Ball.	12	12	12	12	12	12	12	12	119
W. R. Schaefer.	12	12	12	12	12	12	12	12	119
M. Henry.	12	12	12	12	12	12	12	12	119

Ring Target (Off-hand).									
E. Bennett.	5	5	5	5	5	5	5	5	46
J. Nichols.	5	5	5	5	5	5	5	5	45
C. F. Good.	5	5	5	5	5	5	5	5	45
F. Dwight.	5	5	5	5	5	5	5	5	45
G. Warren.	5	5	5	5	5	5	5	5	45
A. L. Burt.	5	5	5	5	5	5	5	5	45

Massachusetts Target (Res.).									
W. R. Schaefer.	12	12	12	12	12	12	12	12	119
H. Max.	12	12	12	12	12	12	12	12	119
N. G. Prentiss.	12	12	12	12	12	12	12	12	119
E. Bennett.	12	12	12	12	12	12	12	12	119
G. Warren.	12	12	12	12	12	12	12	12	119

Massachusetts Target (Off-hand).									
E. Bennett.	12	12	12	12	12	12	12	12	119
J. Nichols.	12	12	12	12	12	12	12	12	119
B. S. Smith.	12	12	12	12	12	12	12	12	119
G. O. Pierce.	12	12	12	12	12	12	12	12	119
S. Lewis.	12	12	12	12	12	12	12	12	119
L. J. Nichols.	12	12	12	12	12	12	12	12	119
A. L. Burt.	12	12	12	12	12	12	12	12	119
H. B. Lawrence.	12	12	12	12	12	12	12	12	119

Amateur Match.
H. G. Bixby. 46
B. S. Henry. 45
H. Max. 45
H. B. Gray. 44
BRACHMONT, Mass., Dec. 10.—The German Schutzen Club of East Boston held their shoot at their range, Braehmont, to-day. The day was intensely cold, and the wind strong and hard to control. The attendance was large and the shooting capital for the day. The Massachusetts target was in use. Mr. H. Max succeeded in carrying off the honors with 106, leading all competitors. Mr. C. M. Gueth, however, pressed the former marksmen very hard and made a total of 103. This new club is in a very flourishing condition, and large scores are anticipated during the season. The following are the best scores made:

H. Max.	12	12	12	12	12	12	12	12	119
C. M. Gueth.	12	12	12	12	12	12	12	12	119
J. W. Thorel (Mary).	12	12	12	12	12	12	12	12	119
R. J. Smith.	12	12	12	12	12	12	12	12	119
H. Willett.	12	12	12	12	12	12	12	12	119
C. J. Barrett.	12	12	12	12	12	12	12	12	119
H. B. Gray.	12	12	12	12	12	12	12	12	119
C. A. Barrett.	12	12	12	12	12	12	12	12	119

GARDNER, Mass., Dec. 9.—At the last practice of the Gardner Club on the Hackmatack range there was some good shooting by the members. There were two scores of ten shots each at 200 yards off-hand, using the inch ring and Creedmore target combined. The following score tells the story:

	R.	C.	R.	C.	Total
Chester Hills.....	90	46	92	48	152
H. E. Nichols.....	81	47	92	46	172
G. F. Ellsworth.....	88	46	94	45	173
A. Matthews.....	88	48	85	48	161
Wm. Austin.....	76	45	85	45	161
L. N. Dodge.....	79	43	75	43	143
F. Knowlton.....	83	45	66	43	149
J. E. Newton.....	86	43	70	44	186
G. C. Goodale.....	81	41	53	40	102
C. Merritt.....	43	41	39	42	109

A challenge has been received from a club at Saratoga, N. Y., for a match of ten men each. The shooting to be done at any home range. It has been accepted and will take place at an early date.

WAKEFIELD, Mass., Dec. 11.—The night shooting of the Wakefield Club continues to be very popular, and to-night some good scoring was done, the illuminated bullseye being frequently hit. The leaders stood:

H. C. Nichols.	5	4	4	4	4	4	4	4	42
G. O. Prentiss.	4	4	4	4	4	4	4	4	42
O. Corcoran.	4	4	4	4	4	4	4	4	42

WORCESTER, Mass., Dec. 10.—At the Pine Grove range, Sturveys, yesterday, the members had a field day. The result is told by the following score:

400 YARDS OFF-HAND.									
Stedman Clark.	5	3	4	5	5	5	5	4	4
Moses Carter.	5	3	0	3	5	5	5	5	39
D. Arnold.	4	0	5	4	4	4	4	5	40
E. A. Bartlett.	5	3	2	4	5	5	4	3	39
200 YARDS OFF-HAND.									
S. Clark.	5	3	4	4	5	4	5	4	4
M. Carter.	5	4	4	4	5	4	4	4	39
D. Arnold.	4	4	3	5	4	4	4	4	40
E. A. Bartlett.	4	4	5	3	4	4	4	4	39
Totals at 200 and 400 yards: S. Clark, 188; M. Carter, 167; D. Arnold,									

anchor in shallow water), and the ballast shall be on the keel as much as possible; she shall draw a little more than three feet of water, and the cabin "house" shall not have more than just sufficient height above the deck to admit of four small dead-eyes being fitted; her sails shall be on the same plan as those of the old boat, except that the mast shall be in two pieces, as described by "Sancelotti" in a back number of *FOREST AND STREAM*—so that by dropping the peak I can instantly change to a leg of mutton sail, instead of being compelled to reef in a sudden squall; the cabin and cockpit shall be much the same as in the old boat, except that I shall carry a light hatch on deck to put over the three-foot cockpit when I leave the yacht alone; every rope, even to the signal-balls, shall lead aft to the cockpit, and tiller ropes shall be led all the way round the boat, from bow to stern, so that I can steer her in whatever part I happen to be; her ground tackle shall consist of four anchors, heavy enough to hold in a breeze, and manila cables shall be used instead of chain; and lastly, I shall have a ten-foot canvas tender, which will be light enough to carry on deck and be easily shifted, containing four or five large, air-tight tin cans to make it buoyant in the event of tilting. Time rigid I think I shall be fitted for as long a cruise as a yachtman could wish to undertake. "Sancelotti," for whose opinions I have an exceeding reverence, grieves me by upholding an "Americanized yawl," with a tall millen-mast and leg-of-mutton sail, and extended boom with corresponding jib. I think such a yawl would perhaps do where there were two or three sailors aboard, but in a heavy outside sea, with only one man to work her, the original English yawl, in my opinion, is the best craft that can be devised.

I have a late number I notice your inquiry for an oil-dove for yachting purposes. I do not use one, for I have been unable to procure one that would stand the rolling and trembling of a yacht at anchor with a sea running; but instead I have a large-sized alcohol stove, the reservoir being filled with cotton packing; and with this stove I can boil, fry, broil and even bake better than with any oil-stove I ever saw. And I have been ducking when my rigging would be covered with ice, and by simply lighting the alcohol stove and putting over it a sheet iron drum for a heater I have made myself as warm and comfortable in my cabin as you are being a great deal at home. The only objection to it is the expense, which is a trifle more than that of a kerosene stove.

SENeca.

MEASUREMENT.

Editor Forest and Stream:—The letters which have recently appeared in your paper and your own comments thereon, tempt me to write a few lines on the subject of yacht measurement. I am the more inclined to this because your pen and pages have been used and with manifest effect to influence the construction of yachts of better dimensions and model than those of the prevailing type, more especially of the small class of yachts, and because the method of measuring has a direct and often very palpable effect in restricting the embodiment of good features in yachts, and of encouraging the development of other undesirable except as a means of gaining advantage in speed. Thus it happens that an English yacht will have a width of beam equal to less than 20 per cent, of her length, and those built here will sometimes exceed 40 per cent, with a corresponding disparity in their respective depths.

Some of this difference may reasonably and properly be due to difference in water, but to any one who has watched the constantly increasing length and depth of English yachts and the contraction of beam it is a plain manifestation of their owners' willingness to suffer loss of accommodation, and to incur increase of expense to evade the penalizing effect of a faulty measurement rule, which makes necessary an outlay for ballast to serve a purpose which might be better accomplished by giving the vessel a little more beam and better accommodations.

Some of this may be the cramping effect of the English rule, a yacht owner must receive from his builder a much smaller boat than he could get for the same money and invest a considerable sum in ballast, or give up expectation of prize winning in regattas. While this is the case it cannot be charged against the rule that it produces a dangerous class of yachts, or yachts that are heavily rigged and unhandy.

It is no uncommon thing for us to speak of the English rule as bad to the extent of being ridiculous. How is it with the rules here?

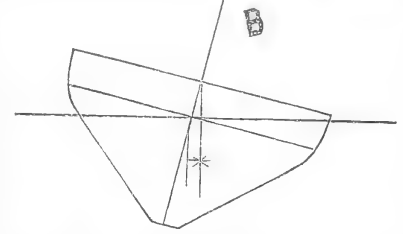
The effect of length measurement in developing the flat and wide variety has been so often the subject of your effective editorial comments that I will only say that I hope never to be caught out in one of those craft in a nasty sea and bad weather unless there is a port within easy distance to leeward.

There are, however, worse rules, I opine, than either the English or length rules, and after some study of the matter through many years, I have formed the conclusion that the very worst rule with which I am acquainted is that of the New York Yacht Club. Viewing the subject as I do, it is difficult to conceive of any rule which could be worse and yet be specious enough to secure any consideration from yachtmen. There is not a single good feature in the rule that it tends to develop, and a bad one that it discourages. If any one should build a yacht to escape the kind of tax which it imposes, such vessel would necessarily be deficient in the characteristics of a safe, comfortable sea-going vessel. The best that can be hoped of such a rule is that it should, far from producing any benefit to it, and that he will not stint his craft of free-board, and will give her ample depth and displacement to make her easy, commodious and safe, let the cubical contents be what they may. This brings us to the question: What would be the reasons why allowance should be made by one vessel to another, in answer this question I shall try to deal rather with the principles to be attended to than the details of the application. A rule should tax only the elements out of which speed may be obtained so far as these are capable of recognition. It should, far from being inconsistent with equity, avoid penalizing features that make a boat safe, handy, roomy, economical or otherwise desirable. Other things being equal the rule which permits the largest liberty in design is best. Something has already been said in your paper as to the reasons why the English rule is so objectionable, and I need not say, other, but a few words on this part of the subject may be timely. In the first place Mr. Scott Russell laid down the principle over forty-five years ago, that as long ocean waves traveled faster than short ones, so the waves of a vessel would be lessened in proportion through it traveled or moved more easily in the case of a long vessel than a short one, and I believe modern experience is in accordance with this theory. In sail-carrying vessels there is an advantage apart from this, inasmuch as that stability or sail-carrying power is increased much faster than the resistance to wind and consequent friction of skin surface. Thus if we preserve the same relative proportions and build a vessel double the length of another one we have increased the wet surface to four times the original amount, but the displacement and power of carrying sail has been increased only eight times that of the first vessel. As, however, the opportunity of carrying sail consists only in length and height it has been increased only as the square of the proportion existing between the two vessels, and not as the cube. It has been quipped, hence in light breezes the larger vessel is unable to gain

the full advantage of her increased size, and the lighter canvas of the small vessel may even tell against the large one. When the wind blows harder the larger vessel has the double advantage of being able to travel faster than is possible with the smaller one, and of standing up to her canvas better, or using more of it. In addition to this there are some minor gains, such as the smaller effect of sea waves upon her, and the reduced frictional effect of water to which motion has been communicated by passing over surfaces which it has reached earlier.

In building larger vessels we find that builders do not commonly avail themselves to the full extent of that rapid growth of stability which comes with increase of size, but accept in part as an equivalent a reduced beam and easier form adapted to higher speeds. They have of course an inducement to do this because, as has been said before, stability increases with size much faster than the area over which sail can be conveniently and effectively spread.

It will appear from the foregoing statement that a large vessel should allow time to a smaller one when such speed is attained that



waves of displacement and replacement are generated—when the surface traveled over is roughened by waves—when per square foot of surface it is necessarily less in the larger vessel than the smaller one.

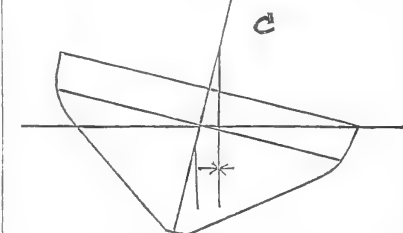
If these premises are correct the conclusion follows that allowance for size ought to be greater for a strong wind than a light one, and greater also over a rough water course than a smooth one, and should be very little over a smooth water course in a light wind.

Some of the above conditions might be met by making the time allowance with special adaptation to the course, and by making it greater relatively for the heavier displacement of the vessel, and consequently at high speed. There could be no difficulty in formulating this.

It might be assumed that as vessels of the same model increase their sail-carrying power and resistance in a ratio approximately knott, that their displacement or tonnage would form a good basis on which to reckon time allowance.

Such an inference is correct only when the same type of vessel is in competition and can, I claim, only be relied upon for just so far as it holds in other cases of the rules for measurement. Inure that only such vessels shall be subject to the rule as have similar proportional dimensions. Otherwise the inference is false and the operation of the rule as mischievous as it well can be. At this time when opinion is quick unsettled, it is, I think, important that no fallacy in regard to this matter should pass unchallenged.

A little attention to the subject will show that of the three dimensions which enter into tonnage or displacement the uses and effects of each are different from the other, and that they have different values as agents for the procurement of speed. They ought to be treated very differently, and to mix them up indiscriminately



is to my mind a make confusion of a kind that can produce only the worst results. It is, in fact, to follow the example of the old time man-of-war-men, who, to get rid of counting lent his messmate a handful of mixed gold and silver, and asked a like repayment.

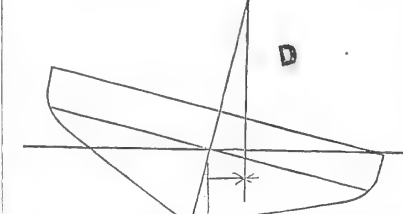
I contend that no well proportioned vessel designed for comfort, handiness and sea worthiness, can by displacement or bulk measurement rule afford to allow time to another one designed expressly to win prizes in regattas over a summer course.

By sacrificing the better qualities of a yacht it would, I think, not be difficult to design a vessel that would be notably successful under the conditions given. That we have not more yachts built of a worse than Mohawk kind is perhaps due to the smallness of the inducement afforded by one or two regattas in a season.

It appears to me that a tax free-board is especially inexpedient. That to tax displacement is inequitable, and inasmuch as it must chiefly operate to produce a limitation of depth such a rule is detrimental to good modeling.

As some help to the study of this question let us take the midship section of a well-known yacht, say the *Undine*, and see the character of the change which would be effected by an alteration of her proportions.

According to the draft of her in my possession, the *Undine's* deck could reach the water at an inclination of 13 deg. It will be sufficiently accurate for our purpose here—that of ascertaining the general character of the change in the yacht's stability produced by alterations in her depth and breadth—to leave out of account the true centre of gravity of that vessel, and to make our comparisons



in each case between the centre of gravity of the whole section, and the centre of buoyancy of each section inclined to an angle of 13 deg. The distance which separates horizontally the centre of gravity from the centre of buoyancy multiplied by the weight of the section as represented by the displacement, will, of course, give the force of the righting power at the angle shown, and the consequent relative ability to carry sail over such a distance. The section A represent the *Undine*. B, the same vessel with the

feet draught, and the same amount taken from beam. C, the *Undine* with two feet added to draught. D, the *Undine* with two feet added to beam. Let W represent the weight of each section, and L the length of the righting lever or the distance horizontally which separates the centre of gravity from the centre of buoyancy and we have the following:

$$\begin{aligned} A-W & 1 \\ B-W & 1.357 \times L .4054 = .55 \\ C-W & 1.614 \times L .65 = .984 \\ D-W & 1.442 \times L .135 = 1.54 \end{aligned}$$

It will be seen that the addition to depth gives no such advantage for carrying sail as is to be got by increase of beam. That it is not equivalent to an extension of it is shown by reference to B. That addition to depth without diminution of beam may fail to give advantage in stability, unless accompanied by increase of free-board, is shown by C. That addition to beam does add immensely to sail-carrying power on a line is shown by D.

That the loss of stability in narrow yachts is partly compensated, even in smooth water, by easier lines and smaller riggers, and that such boats are immeasurably superior and more handy is, I think, so palpable that the recognition of it must constantly increase.

Hitherto, however, notwithstanding that the N. Y. Y. C. is exceptionally conspicuous in taxing depth and free-board, and that ordinarily we have no limitation of these properties, our yachtmen and builders have shown no disposition to take more than a minimum of either. Our open yachts, the most extreme type of racing machine, usually have a draught of about 35 in. an inch to foot of length, and are deck to water when inclined 12 deg. Larger vessels commonly have their decks to water at an inclination of 15 deg. Yacht builders will tell you they do not want too much boat. Nor do they want to get the sails too high. There appears to be a more healthy disposition growing, but I am afraid that it would not bear to be handicapped. The Seawanhaka Club has a rule that is probably the least objectionable in use. It takes into account beam and length only, and although the club contains some deep keels as well as very wide ones, it is not at all apparent that the wide ones need to be encouraged to enter regattas, or that the ones with heavy displacement and great free-board take all the prizes. There can be no question that the introduction of a displacement rule would effectually shut out from competition this type of boat. In the case of the extreme English type, which is not at all a bad type, especially where outside land is permitted, it would be easy to show why the inducement is toward the most extreme, and why some penalty on depth or the favorite mode of ballasting would be necessary. A much better alternative would be to relieve the yachts from the cramping and injurious effects of the present rule, heavy tax on beam. If this were done and at the same time our own rules modified so as to encourage more depth and less beam, Mr. Archer would find that we had found the long and the short of the question, and better yachts would be produced in both countries.

J. HAYES.

New York, Dec. 4.

YACHTING NEWS.

NEW YACHTS.—Hardly has the season closed for one year, before the chips begin to fly in all the building yards in expectation of the next Prospector's report. The season has been a very successful one, more than likely that this winter will see a larger number of yachts stretched than any yet gone by. The builders of Boston already have much new work in hand, principally of the smaller cruising classes of sloops which meet with so much favor along the rugged coast, and the list of the larger yachts is not much less. The Chesapeake and Potomac Rivers are very active, and repairs promises likewise to be a long one. The new yacht, *Stanton* has launched the new composite steam yacht for Mr. Lorillard already described in a recent issue, and they are getting out the plans for another seagoing steamer to replace the *Polynia*. From the Chesapeake the new yacht, *Stanton*, is expected to be a fine one. The *Pioneer Iron Works* close by are busy with a flush deck steamer and in Baltimore Mr. Say's bark-rigged *Bretagne* is soon to go into commission. Carl, of Northport, has a large schooner on the stocks for Mr. Faxon, of New York, and the Pollons are busy with one like the *Norma* to the order of Mr. Godwin, while on the lakes the prospects are bright and a fleet of new yachts will be turned out in time for the Spring races. In California much activity is manifested in yachting circles. The new schooner *Aggie*, 80 ft. long, built for Commodore Mackay, by the Hall Brothers, of Port Ludlow, W. T., having recently been delivered in San Francisco. The demand for steam yachts, especially for those of high speed, is brisk and the Herreshoffs of Bristol, R. I., have their hands full in consequence. Mr. Holland's new steamer is well advanced. She is 60 ft. long, 8 ft. beam and of composite build, the boiler being of the coil type with a grate 42 in. diameter. Speed 15 miles. The cabins will be handsomely finished in hard woods, the saloon being 12 ft. long with a stateroom opening into it. Mr. Lorillard is having a steam launch built by the same parties. Length, 30 ft., beam 5 ft., mahogany planking to the deck, and ash inside. Her engines will be compound, taking steam from a coil. All the metal work will be of polished brass, including engine and boiler, and a speed of eight miles is guaranteed. This launch will probably be the best of its kind for some time. It has been turned out in America and in point of speed and seaworthiness much superior to the usual run of launches of the old pattern. The well-known sloop *Sadie* is also in their hands for alterations. She will appear next year as a schooner 64 ft. long and thoroughly overhauled and refurnished.

THE HERRESHOFFS.—The Herreshoff Manufacturing Company have also just delivered to Messrs. Eliot & Earl a steam launch for sporting purposes, her design and arrangement having been planned by the latter. She is 30 ft. long, 4 ft. beam, 4 ft. 6 in. draft, and is 45 ft. long with 8 ft. beam, schooner-rigged and steams ten miles, compound condensing engines, twin screws which, by a novel device can be raised or lowered to suit the depth of water, the launch being able to steam in fourteen inches depth. The cabin is 12 ft. long, finished in cherry, oak, mahogany and California red-wood. She has been named the "Sport," and is now in active service on the Chesapeake, her owners lagging 180 ducks as the result of one day's shooting. Besides their yacht work, the company has a large general engineering establishment, including an engine for a draw bridge, machinery for the Atlatro Gold Mining Company, and a portable pumping engine for the U. S. Fish Commission, the latter delivering 1,800 gallons a minute. The Commission was the pumps for filling and emptying ponds in which the fish breeding was carried on.

EXPERIENCE AS THE TEST.—So much nonsense has been written and talked against outside ballast by those who have never seen a ballast board a yacht so fitted, that the imaginative brains of the patriots who despise what is obviously the most natural and most beneficial position for ballast will do well to note the result of English experience in this matter. There is no throne, no altar, but the very practice which they so much affect and possess so little. We quote from the *London Field*: "Putting the whole of the ballast outside was thought to be a bold experiment, but those who know how Lord Quinlan and Knaggs have performed would listen to no objections. And so the designers of Freda and Euterpe put practically the whole of their ballast on the keel, but the builder of Euterpe was adverse to doing the same and Euterpe, by comparison, suffered in consequence. The heavy weights, too, manna and Vandana, had a much larger portion of their ballast outside than had been previously attempted, with the single exception of Sirix, and that exceedingly comfortable yawl was undoubtedly improved in seagoing qualities by the increased weight of lead outside; and so no one who has understood the matter felt the least doubt about the manner the heavy lead kept the vessel firm in a sea, and all the old prejudice against outside ballasting has been, it can be assumed, swept away forever." It is about time that the timidity and stupid cant phrases against outside ballast which have been thrown overboard by the designers should give the benefits of more moderate beam by a low centre of gravity.

DETROIT CANOE CLUB.—The following officers have been elected: Commodore, C. B. Hull; Vice Commodore, F. H. Seymour; Par Commodore, J. E. Watson; Secretary, W. J. Craig; Treasurer, J. E. Watson.

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Col. Pt. & Whitestone, 7.35, 8.45, 10, 11.25 A.M.,
2.35, 3.35, 4.35, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M.,
12.15 night.

Sundays, 8.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.
Fishing, 7.35, 8.45, 10, 11.35 A.M., 2.35, 3.35,
4.35, 5.35, 6, 6.35, 7, 7.35, 9.15, 10.45 P.M., 12.15 night.

Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.
Far Rockaway, 8.35, 11 A.M., 4.35, 5.35, 7 P.M.
Brooklyne Beach, 11 A.M., 4.35 P.M. Sundays, 9 A.M.
and 6.35 P.M.

Great Neck, 8.35, 11.35 A.M., 4.35, 5.35, 7 P.M.
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Monday, Wed., Fri. and Saturday, 12.15 night,
Wednesdays and Sundays only from Flatbush av.

10 P.M. Sunday, 9 A.M., 1.35, 5.35 P.M.
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A.M., 6.35 P.M.

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Huntington and Northport, 8, 10 A.M., 4.35, 6.35
P.M. Sundays, 9 A.M., 6.35 P.M.

Lakeland and Farmingdale, 8 A.M., 3.35, 5.35 P.M.
Port Jefferson, 10 A.M., 4.35 P.M. Sundays, 9 A.M.,
10.35 P.M. 10, 11.35, 12.15, 1.35, 3.35 P.M. Sundays, 9
A.M.

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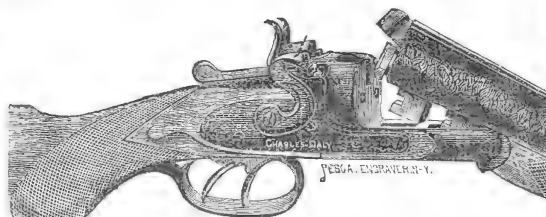
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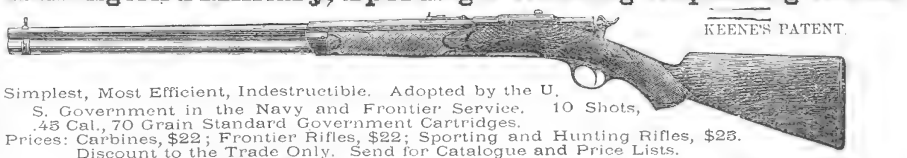


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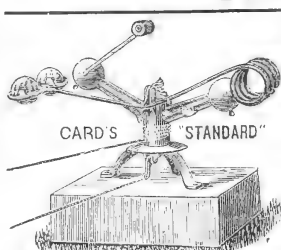


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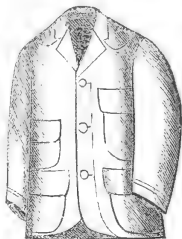
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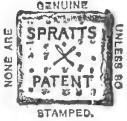
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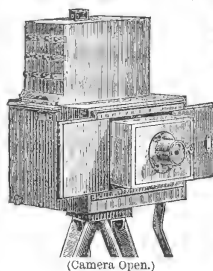
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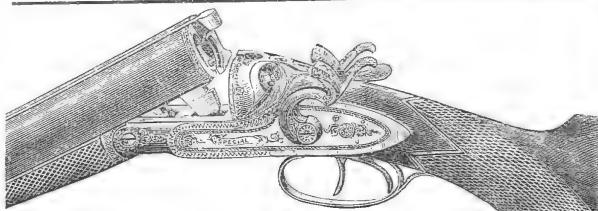
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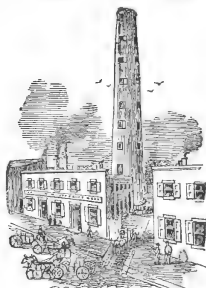
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NEW YORK, THURSDAY, DECEMBER 23, 1880.

Vol. 15—No. 21.
Nos. 39 and 40 Park Row, New York.

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FOREST AND STREAM.

NEW YORK, THURSDAY, DECEMBER 23, 1880.

• THE FOREST AND STREAM goes to press Wednesday. Correspondents are requested to mail their communications so that they may reach us before that day.

DO NOT FORGET that a paid subscription to the FOREST AND STREAM for one year is a most appropriate Christmas gift.

THE PROPOSAL to require licenses from gunners on Long Island will meet the hearty approval of the better class of sportsmen, and as land-owners are to be excepted from the requirement, farmers will be equally pleased with it.

THE CABLE brings us the news of the death of Francis Trevelyan Buckland, or as he was best known, Frank Buckland, who was perhaps the most widely known writer in England on natural history. For several years he had conducted the Natural History columns of *Land and Water*, and through that paper and other mediums he had been remarkably successful in popularizing that study.

WHEN the FOREST AND STREAM was considering which one of many special features, that presented themselves, should be provided for its readers this Christmas week, nothing seemed more pleasing and appropriate than a collection of reminiscences of that famous coterie of writers, who contributed long ago to the old *Porter's Spirit*—the FOREST AND STREAM of its day. And it was most fitting, too, that these reminiscences should come from the pens of those writers themselves. We accordingly communicated with such of them as we knew to be still living, and our requests have been met by a most gratifying response, and we present to-day contributions from Gen. H. H. Sibley, Isaac McLeffell, Col. Thos. Pictou and S. C. Clarke.

These are the few who are left; the members of that band who have not passed away with their generation.

This reunion of famous writers, after the lapse of a quarter of a century, is a notable event in American sporting literature.

CENTRAL FISH CULTURAL SOCIETY.

THE meeting, which is partly reported in another column, was a most interesting one, and was characterized by several important and highly interesting papers, which were followed by equally interesting discussions. We have urged the members to put their views in form of a "paper" which, prepared at leisure, fully represents their ideas, and is always correctly rendered in the local and other papers as well as in the Society's reports. This will be remedied next year, as a resolution was adopted which authorizes the executive committee to call on members for a paper, and then to prepare a programme in accordance with this plan.

Among the papers read was one by Prof. Forbes on the food of fishes in their early life, which has an important bearing upon pisciculture and the intelligent stocking of waters; one by Mr. Fairbank on the breeding of California salmon in fresh waters, something which has been done by him in Geneva Lake, Wis., where his salmon have not only lived but have actually spawned in the lake; one by Mr. Ballou on protection of fishes in Lake Michigan; one by Mr. Mather on the growth of carp in America, wherein he proved by many witnesses that in their new home their growth exceeded that of their native land three or four times; and one by Mr. Shaw on fishways, besides letters and communications from others.

One of the humors of the meeting was a joke on Commissioner Shaw, of Iowa, whose resemblance to General Garfield is so strong that strangers looked after him. One of the wags told a waiter at the hotel that the gentleman dining at the next table was the President-elect, and that the one with him (Commissioner Bartlett, of Illinois), with the huge moustache, was General Logan, and the fun lay in seeing the procession of darkies file by to get a look at the celebrities, and the astonishment of Shaw to see the pyramids of dishes containing all the delicacies in the house piled in front of him until no space was left for more.

We will publish the papers and discussions in full, from week to week, and afterward issue them in pamphlet form. The members of the Society recognized the labors of FOREST AND STREAM in the line of pisciculture, and the few who had not formerly taken it ordered it sent. It may be that the Society will never get the legislation it seeks from the general Government, but if it never accomplishes legislation of any kind it has a sufficient reason for existence in the diffusion of piscicultural knowledge, the exchange of ideas and the general waking up of the public to the value of pisciculture through the press, which gives, as the Chicago local papers did, columns of discussions and extracts of the papers read and comments upon them.

THE NATIONAL RIFLE ASSOCIATION ELECTION.

WITHIN a few days the life members of the National Rifle Association will be given an opportunity at the annual meeting of the association to fill a number of places in the Board of Directors. Common sense would seem to dictate that a change be made from the old plan of complimentary re-election of retiring members, and that an effort be made now if ever by the actual shooting men of the association to make the Board of Directors something more than a mere parcel of figure-heads, at least as a large majority. The affairs of the association have now reached a stage where it becomes an absolute necessity that somebody should do something. From being a live, healthy organization, leading rifle practice and infusing life into the sport, the National Rifle Association has degenerated into a mere empty shell. The military shooting on the one hand is entirely removed from the jurisdiction of the Board, and on the other hand the most popular all-comers' match of the year 1880 has been carried out not only without the actual co-operation of a majority of the Board, but with expressions of the liveliest disgust and opposition on their part. The fact now is that those who control affairs in the National Rifle Association are not in active and earnest accord with the men who do the shooting on the range. Every important step which has been taken has been forced upon the Board, and this unwieldy force of incapables have been rather a hindrance than a help to rifle shooting. A single energetic man could easily run the Creed-

moor range, and the only function which the present Board of Directors seems to fulfill is that of passing ridiculous resolutions at inopportune moments. The Palma has been virtually shelved through the weight of conditions laid upon it, and the whole question of international small-bore shooting has been dragged into a quagmire of confusion, and there dropped. Having the opportunity to become the dictator in all matters connected with rifle shooting in this country, the association, by an annual turn-over of its rules and regulations, has managed to make a match-shot "under the rules of the National Rifle Association" considerable of a risk unless everything passes off exceptionally smooth. The financial management of Creedmoor might come in for no small share of sharp criticism were we inclined to venture into that field.

The whole remedy for this state of affairs lies with the shooting men among the life members. There are enough such to select a good, live contingent at once, and ultimately to the weeding out of every fossil from the Board. There has been growling and grumbling enough, both on and off the range, at the neglect of those in control. The whining ones can now put their cry for reform into practical shape of ballots. Let them decide upon a list of men who thoroughly understand the needs of modern rifle practice, men who themselves know somewhat of the seemingly slight causes which may cause a man to turn with indifference from one range and seek another. Our plan for a "change" is no idle one, for affairs in the N. R. A. cannot well be worse than they are now, and in face of the fact the coming shooting season will determine whether the N. R. A. is to live or die. The infusion of new blood into the Board must be a help to its deliberations.

BANNERS and bunting and streamers, the boom of cannon and the flare of skyrocket, these are the attendants of our midsummer anniversary, the symbolism of our national pride and patriotism. Each recurring holiday is marked by its distinctive and approved material expression of the sentiments which prompt to its observance.

And Christmas has its greens. This week our homes are decorated with the simple boughs brought in from the woodland and fragrant with the spicy odor of the forest.

There is much of significance in this, that for the memorial of that day which the Christian world has set apart for the commemoration of the one momentous event in its history, it rejects the decorations of art and finds in the simple gifts of nature its fitting and eloquent symbols of joy and cheer and hope.

It matters little when or where this custom arose. That it has lived and is year by year more widely adopted is an unconscious, perhaps, but none the less emphatic and true, expression of man's sympathy with Nature. It is the unerring token of her children's affection for Mother Earth.

MASSACHUSETTS GAME PROTECTION.—The Massachusetts Fish and Game Protective Association have appointed Messrs. Iris W. Adams, John Fattler, Jr., and F. R. Shattuck, a committee to superintend, if necessary, a revision of the Game and Fish laws of the State during the coming session of the Legislature. This committee invites correspondence from other similar committees of the different State Associations, or from individuals interested in the subject of fish and game protection, and will welcome any suggestions which may bear on this matter. Letters may be addressed to any member of the committee, in care of the Association.

WORDS, WORDS, WORDS.—When Carver was setting out for Europe, he prepared the way by a grandiose exchange of wordy challenges to Bogardus; and when the flood of newspaper notoriety thus secured was at its height the "Doctor" mounted the crest of the wave and rode into fame across the sea. After a prolonged absence abroad Carver appears again in the daily papers with more challenges to Bogardus. This means, we presume, that Carver is thinking about coming back to America. He is preparing another wave of newspaper notoriety, and when the sounding-line shows the requisite depth of water on the bar we may look for the redoubtable marksman to come sailing grandly into port.

Tides—moon—moonshine. Carver challenges—words—words—words.

A Christmas Reunion.

A VISION OF THE PAST.

In the silence of my room, at this solemn noon of night,
I sit and muse of other years, of years that were so bright.
There's no light of lamp nor gleam of fire to dissipate the gloom;
No star-spark nor a moon-ray the darkness to illumine.
As down Time's dusty corridors I turn my wistful eye,
Fond retrospect brings up the scenes of the days so long gone by.
I seem to see before me, like old portraits on the wall,
Sportsmen whose forms and features I can at once recall.
As memory's magic wand I raise, the men of other days,
Like apparitions of the past, come trooping to my gaze.
I behold in this, my vision, each old familiar scene,
Where we have tramped the meadows or roved the woodland green;
Where we've scaled the breezy upland, or plunged in bosky dell
In summer's heat or when the leaves of russet autumn fell.
In hemlock wilderness, where roved the wild deer herds of Maine,
Where antlered stag or tawny doe held unmolested reign;
Where the drum-beat of partridge or woodcock's startled cry
Were heard in pine thickets down where the brook swept by.
And where lone Adirondacks their shadows wide extend,
And the blue mountain summits with the horizon blend;
Where sparkling stream and crystal lake, like gems, the vale lay,
There, well equipped with rod and gun, we loved to take our way.
And where the sylvan precincts of Illinois outspread
Their measureless green pastures, where thick the grouse flocks
Fed;
Where myriads of wild geese and coveys of brown quail
Filled grove and plain; where oft we kept the trail
Fast by the shores, old Ocean, by rocky reef and bar,
In shelly cove, or where the sand-jit stretched out white and far,
There, hidden in our boat, we'd sit in ambush for the night
Of hovering barn or Lark-like geese from day-down until night.
And oft where ready marblers their league-wide meadows spread,
And plover-call and curlew-cry were resonant overhead,
There, oft amid those wary flocks, to deal out death we came,
And home return'd with sumptuous wealth of migratory game.

And when the winter days had come, and sports of held were o'er,
And, gun and rod and dog dismissed, we sought our homes once
more,

We lo'd by fireside blaze to sit and there enjoy again,
In genial talk, the noble sports of wood and flood and plain.
Cale Loring, the old Boston, prince of fowls rare,
Can I forget your royal sports, your skill beyond compare!
Forget not "Aurn," "Cyress," in these recording rhymes,
Then won't you tell the sanction of *The Spirit of the Times*?

Tall Son of York! O, Porter, who might forget thy fame?
What memories now brighten at mention of thy name!
So eloquent in speech, so cultured in thy mind,
A giant in thy form, as woman-soft and kind!
And others, too, were the re-remembered with gun and pen—
Stiles and Pleton, Scott and Wilkes, all princes among men;
Anthony and Clarke and Foster, and, chiefest name of all,
Frank Forrester! What scenes those names recall!

Poor Herbert! Who so brilliant, so versatile as thou.
When in snailing mood or with a clouded brow?
Ah, who so earnest in the field, amid the birds of air,
Or where the trout and salmon gleamed in the sunny glare.

These portraits of kind faces, these pictures of the past,
Glow ever in my memory; to fade they will be last.
But, alas! the dust and shadows of the grave have closed forever
On many of these we cherish'd in the long-departed year.

Shelter Island, L. I.

ISAAC McLELLAN.

"THE SPIRIT" CROWD.

BY COL. THOMAS PHOTOS.

THIRTY-FIVE years ago *The Spirit of the Times*, the metropolitan weekly, for many years previously prosperous under the peculiar editorial management of William T. Porter, had attained the height of its popularity, celebrity and influence through its recognition as the "gentleman's newspaper" of the period, with a corps of contributors comprising numerous writers of local distinction in every portion of the country, whose productions, generally composed during moments of compulsory leisure and expressly designed for instruction or entertainment of a distinctive class of appreciative readers, first saw the light of day in this diversified sheet. The Porter brothers were men of decided ability and of rare literary attainments, genial, social companions and of extended worldly experience, and hence it was not surprising that when William, the "Tall Son of York" as he was familiarly designated on account of his remarkable stature, assumed control of *The Spirit's* columns, aided by the advice and literary co-operation of his more highly cultured brothers, it penetrated with incredible rapidity into the houses of turfmen, sportsmen, planters and country gentlemen, while being acknowledged in this metropolis as a standard for refined amusements.

It must be remembered that in those days, when the passing generation were flattered with a decided predilection toward patriotism and a prejudice favoring social exclusiveness, professional gentlemen and those of habitual leisure were, as a general rule, not only ripe for the influence of the pastime, but the satisfaction of exercising their contributions to *The Spirit* transferred to the Old World with laudatory comments upon the unexpected uprising of a sporting literature in an American wilderness. Such was the case particularly in the instance of Tom Thorpe's "Tom Owen,

the Bee Hunter," and the "Big Bear of the Arkansas," two sketches, descriptive of life in the Southwest, for which he had vainly sought a medium of publication at the Fourth, where he was then dwelling a comparatively obscure editor. Upon advice of a friend the manuscripts were transmitted to Porter, whose appreciation of talent and humor and keen sense in detection of character, at once suggested prominent publication of the articles, which were, through his indorsement, reprinted extensively in popular journals, and finally adopted in England as types of hitherto unknown American characteristics. Through this fortunate chance in making first appearance in *The Spirit*, and a subsequent contribution to the *American Turf Register*, likewise edited by William, Col. Thorpe acquired a profitable reputation, enduring up to the time of his death, inasmuch as he was among the very few sporting writers wielding a money making pen. *The Turf Register*, moreover, was the main cause of bringing into existence as a sporting author Frank Forrester, as therein Herbert made his debut in his controversy with Cyress, regarding quail, continued in a series of articles, which, subsequently enlarged and embellished, laid the foundation for a number of papers upon American game printed in the magazines and forming the skeleton of his *American Field Sports*. Porter, personally, was no ardent disciple of the gun, but a most devoted worshiper of the rod, spending his vacations annually in making short journeys into the trout regions of Lakes Erie and Ontario, and the Sulphur Springs and John Brown's Tract, usually accompanied by some genial friends of more practical piscatorial abilities than tendencies for literary exertions, prominent among whom could be remarked Henry Inman, the artist; Brough, the vocalist; Genio C. Scott and Lyman Derby, aspirants to leadership of fashion in the fabrication of male garments; Wilkins Kendall, of the New Orleans *Picayune*, yearly a visitor to our city during the summer months; Eschick, an eccentric gentleman and representative sportsman, and several other Virginians, whose adventures, duly detailed orally upon their return, either in *The Spirit's* private office, significantly denoted "The Sanctum," or over a fish dinner of captured game, served up to order by Ned Windust, beneath his professional supervision, and in a quaint subterranean parlor, that unostentatious apartment of the Shakespeare, into which none save the elect of his patrons were suffered to penetrate, furnished the material for the most interesting and instructive anecdotal narratives, whipped into shape by the friendly pens, the identity of the chief actors in which, although well known to members of *The Spirit's* coterie, being discreetly concealed from the general public who, devoted to business cares, could not be brought into appreciation of a professional man's devotion of time to apparently frivolous pastimes. Consequently when a really capable writer, dependent in a measure upon popular favor to sustain a professional reputation, thought proper to transmit a contribution to *The Spirit*, he cautiously assumed a *nomme de plume*, while resorting to devices to hoodwink his business friends as to cause of his temporary absence from town. Like William P. Hawes, whose lucubrations as "Cyress, Jr." have been compiled and edited by Frank Forrester with intent of securing a trifling pittance for his widow, William C. Barrett, whose fair fame as a lawyer has been of late years entirely obliterated by an act of unparliamentary dishonesty, was the attorney of high standing, and at the same time one of the most inveterate and skillful fishermen of his day, equally an adept with rod and pen, upon whose friendly advice, and at whose warm solicitation Frank Forrester was induced to undertake, and finally to complete his "Fish and Fishing," in which work, however, he was materially aided by "Dinks," a thoroughbred sportsman—Captain Spencer Peck, of the Royal Canadian Rifles. A fluent and versatile writer, Barrett persisted in preserving his inviolate ground of potential change in the aliases appended to his contributions and variation of his general style so effectually as precludes possibility of positive identification in their authorship. During the earlier days of his practice at the bar, finding it to be hopeless to resist temptation for indulgence in his favorite diversion, he would console clamorous clients through assurance of being called out of town to argue a motion before the Chancellor, so strong was the prevailing prevailing sentiment among business men against their legal advisers going forth for "a day's shooting." Another clandestine contributor to *The Spirit* was the Rev. Dr. Bethune, who, however, mustered courage adequate to public avowal of himself as editor of American edition of "Walton's Angler," much in demand with local bibliomaniacs hunting after the volume, on account of the reverend annotator's reputation, with an impulse similar to that actuating acquisition of a black letter Julia Benger.

It will be perceived that in those earlier days a sporting lawyer or a piscatorial divine stood in danger of excommunication were his proclivities to be honestly confessed, and hence came it that the inviting fields of sporting literature remained with us untillied save by surreptitious or disguised laborers, until Mr. Hawes and Herbert set a commendable example to ambitious aspirants through voluntarily unmasking their faces to an admiring public. Henry Wiman Herbert, who, in the earlier days of his career, was in the particular of being condemned to involuntarily literary servitude whereby to earn his daily bread, and for many years indulgence in field sports was rather a compulsory relaxation, necessary to relieve an unmitigated pressure upon an overtaxed brain than for the sake of mere amusement. It was fortunate for the sportsmen of America that Herbert chanced to be a man of very limited means, otherwise he would never have been forced into composition of these volumes upon the subject of his most ardent passion, for, during his lifetime, he toiled assiduously to attain celebrity as a classical and historical author, regarding his sporting contributions to magazines and newspapers as mere ephemeral productions to alleviate passing financial difficulties. Upon the "Roman Traitor" and "Oliver Cromwell, England's Great Protector," he placed his firmest reliance for a durable reputation, while upon "The Captains of the Old World" he bestowed more labor and research than upon the turf, for an annual rider he had been beaten, however, on account of the superiority of the horse of his antagonist, the well-known Lovel Purdy, upon the Ocean Course.

When *The Spirit* was commenced by a gentleman named Fisher, who prided himself upon being brother to the famous

and precocious actress Miss Clara Fisher, it was announced to be a comedy of the kind of Field Sports, the Turf and the Stages," but, upon its falling beneath the charge of William T. Porter, the literary department was assumed by Dr. Porter, who at one time was co-editor with N. P. Willis in a weekly, *The Corsair*, intended as a rival to the *Albion*. Among the composers in *The Spirit* office were Horace Greeley, who was indebted to William, when foreman of the printing house of Bangs & McElrath, for the first employment obtained in this city, the dog having originally come from the same turf in New Hampshire. Greely's first editorial essay appeared in *The Spirit*, clandestinely inserted during absence of the editors at the races and was deemed to be so brilliant as to draw forth an injunction not "to do the same again." Some legal difficulties having occurred touching ownership of *The Spirit*, the paper was, at Greeley's suggestion, issued for a couple of weeks as *The New Yorker*, a title adopted by the "white-coated philosopher" when venturing into business for himself in conjunction with Henry J. Raymond, another of Porter's townsmen. The success of *The Spirit* as a literary journal was materially enhanced through perpetration of an ingenious hoax upon Porter, whose publication in good faith created somewhat of a sensation in the literary circles. Dickens having announced the publication of a new serial to succeed "The Pickwick Papers," which literary composition was initially designed to be a comedy of the kind of Field Sports, the Turf and the Stages, the author, who was a letter-press accompaniment to etchings executed by Seymour, wrote "Sketches" had attracted much attention in England, some one supplied *The Spirit* with the opening chapters of "Boz's" new romance, the authorship being variously ascribed to Richard Adams Locke, Herbert, Lewis Gaylor Clark, Clay the caricaturist, and other writers of disfigurement, whose letters of recommendation, more or less indignant, contributed amazingly to the amusement of the imposition when it was discovered to have been a transcription of an absolute English sporting romance by an obscure lawyer's clerk.

Correctly speaking *The Spirit* could never be regarded as a sporting periodical, although well supplied with casual articles upon the game and field sports of our country, inasmuch as it aimed at being the recognized organ of the American Turf, to the prejudice of secondary interests. Consequently a vast majority of its contributors, resident out of town, were either unacquainted with the turf, or, in some instances, portraying incidents in Southern and Western life of a character, who remained almost personally unknown to "The Spirit crowd," as the habitual visitors to the office were familiarly designated, unless taking advantage of a casual visit to this city to pay their respects to the "Tall Son of York," who ever received them with a prodigal hospitality, minous to his financial prospects. The horse was the idol of William's admiration and no man ever evinced more indefatigable zeal in the enlistment of artistic talent to commemorate the features of his equine favorites. *The Spirit* was published wholly by subscriptions of ten dollars annually—assuredly a very high price—and in part compensation the publisher presented to his patrons large steel engravings, suitable for parlor ornamentation, thus familiarizing the denizens of the rural districts with works of art indicative of a refined taste. Before the invention of Daguerre and the subsequent innovation of photography, all portraits were made by hand, and while an animal painter was more of a rarity than a Royal Academician. *The Spirit* was consequently forced to rely upon native-born genius and, through employment of Henry Inman, probably the leading portrait painter of his day, and Troyes, an animal painter (subsequently attaining a European celebrity), to supply elaborate paintings, whence were drawn designs for engravings upon steel on an extensive scale, contributed liberally toward advancement of a branch of art at present passed materially out of use.

Forty years since New York city may have been regarded as the centre of the turf interest at the North, for, singular to remark, a strong sectional feeling characterized our races from the earliest inception of that sport upon this continent, Virginia claiming representation of the South and New York that of the North from the days of the exciting match between Zelphie and Henry that of the more recent contests between Fashion, bearer of Northern colors, and Boston and Peyton, respective champions of a "solid South." During the spring and fall meetings of the Jockey Club, then held upon Long Island, the sanctum of *The Spirit* was a scene of edifying confusion as a neutral ground, whereupon the magnates of the turf, even men of distinction in paths of public life, assembled in harmonious communion. Prominent among these horse breeders, who resided in the South, Col. William R. Johnston, of Virginia, a small sized gentleman with a luxuriant luxuriance of gray hairs, rather grandly poise claimed as being "the Napoleon of the turf;" Wade Hampton, of South Carolina, the perfect type of Southern chivalry; Long, of Washington, and Dick Ten Broeck, of Kentucky, famous to the present hour through his trans-Atlantic experience. To meet these men of note our city produced such sporting worthies as Alderman Charles Henry Hall, a patrician, whose town residence had been converted into the famous Niblo's Garden; Walter Livingston, owner of Trustee, a diplomatist of the old school, familiarly known as "the last of the white cravats;" William Gibbons, owner of Fashion, an enterprising stamper owner and indeed founder of Commodore Vanderbilt's immense fortune; and the Stevens brothers, subsequently identified in the promotion of yachting and development of engineering enterprises—a congregation of wealth, probity and intelligence the like of which, it may be well observed, we may never chance to see again.

Editor Forest and Stream:

Yours of Nov. 29 is before me. I should be glad to comply with your request for an article for your Christmas number, but I fear it will not be in my power, as I have been for many weeks laid up by an attack of rheumatism and neuralgia in my head, which prevents me from the use of my pen, except for short notes. When I was attacked I was preparing to write up the story for *Forest and Stream*, but I cannot anticipate. This disease is the angler's special enemy, as I have good reason to know.

I think my cousin, Isaac McLeLlan, and I are among the oldest writers on sporting subjects. I began more than fifty years ago, in the *Sporting Magazine*, published in Baltimore by J. S. Skinner, and have written for most of its successors.

As soon as I am able to travel (if ever) I expect to go to my usual haunt in South Florida, from which you will hear from me.

When my friend Hallowell left your paper I expected to lose my interest in it, but such has not been the case. I see no falling off, but rather the reverse.

Very truly yours,

Marietta, Ga., 1880.

S. C. CLARKE.

SPORTS OF BY-GONE DAYS.

Editor Forest and Stream:

The pen of "Hal a Dacotah," which you call upon to perform service for your Christmas time issue, has been so long unused in the sporting line that it is decidedly rusty. I must endeavor to burnish it for the nonce with what success you may be the judge.

Arma, virumque cano, as old Virgil hath it. If I cannot sing as did the poet, I can at least tell your readers in plain prose somewhat of the men and of the arms they used in other days in their field sports.

The co-contributors with myself to Porter's *Spirit of the Times* and other sporting journals more than a quarter of a century ago were Frank Forrester (Wm. H. Herbert), Kendall, T. B. Thorpe, Picton, Lewis, Audubon and others of more or less note. With Porter, Herbert and Kendall, I was personally acquainted; they all passed away years since to the undiscovered country.

"Their swords are rust,
Their bodies are dust,
Their souls are with the saints, I trust."

The writers I have referred to composed a corps which for ability and brilliancy in their particular department of literature has seldom been surpassed. Dwelling in different portions of the Union the aggregate of their experiences as from time to time made public had much effect in popularizing legitimate field sports, and in repressing the practices of poltroons now unhappily too prevalent in the land.

Our place of rendezvous when we were in New York city was Porter's editorial sanctum, where we discussed sporting themes generally and "fought our battles off again." Herbert enjoyed these reunions exceedingly, and seemed never to weary of listening to the narrations of those of us who had had adventures in the field. He was in turn a most entertaining and instructive companion, thoroughly versed as he was in the theory of hunting and fishing not only, but in all subjects of general interest. He was positive in his opinions and somewhat impatient of contradiction, but ready, nevertheless, to make the *amende honorable* when convinced that he was in error. On one occasion in reply to my statement that canvas-back ducks were abundant in Minnesota, he rather bluntly asserted I was mistaken, as that fowl had never been found in this section. I told him I was familiar with aquatic birds, and if I failed to furnish him with specimens from this far off region which he would acknowledge to be the *sinon pure*, I would willingly pay for the oyster supper for the company when next we met. He accepted the wager, and on my return home it was my fortune to kill a large number of canvas-backs, from which I selected a full-grown male and female, placed them in the hands of an expert to be thoroughly prepared and mounted, and I then despatched them by express to the place I told him at the Cedars where he resided. When I again saw him in New York in the fall of the same year he frankly acknowledged that he had lost the bet, and forthwith invited those present to partake of the oysters and accompaniments, which they did, and a jolly time we had of it at his expense.

Herbert and myself had corresponded previously to becoming personally acquainted. He did me the honor to dedicate to me, in flattering terms, one of his charming works called *The Sportsman's Guide*, and he was so distinguished a sportsman and author which was peculiarly gratifying. I have always believed that there was some event connected with Herbert's self-exile from his native land which was never divulged, but which preyed upon his peace of mind and caused that deep depression to which he was subject at intervals, and which, combined with the infelicities of his domestic relations, brought about the final distressing catastrophe.

Required in piece.
Porter, *Spirit of the Times*, and Kendall were both true-hearted and genial men, as well as able and successful writers. They had hosts of friends, North and South, and were general favorites.

My own sphere of operations was far more extended than that of any of the sportsmen I have named, and hence the articles furnished by "Hal a Dacotah," although by no means remarkable for their literary merit, were sought for with eagerness, because of the novelty of the scenes he described and the interest of the field sports at which he partook. That field comprised what are now known as North and South Dakota, the whole of the great State of Minnesota, lying west of the Mississippi River, and a part of Eastern Dakota. No white men inhabited this vast region, save the comparatively few who were engaged in the fur trade with the Indians. There were to be found at all seasons of the year the buffalo, or bison, in countless numbers, great herds of the wapiti, or elk, the deer, the bear and the wolf, and not infrequently the panther and other animals. The streams were bordered with beaver, otter, mink and other amphibious, and the lakes, of which there were more than seven thousand in Minnesota alone, were covered in the spring and fall with swan, geese and ducks of every variety. It was in this elysium of hunters that the youthful Hal, not long out of his teens, six feet in his stockings, athletic and active, a sure shot with rifle, shot-gun and pistol, and with an enthusiast in field sports, for successive years piled his weapons to the destruction of myriads of fur-bearing animals. His contributions to the sporting literature of the period were strictly truthful, but tinged with the somewhat romantic character of their young author. The interest manifested by the public in those effusions was enhanced by the fact that there was no other representative of the extreme Northwest in the group of writers referred to.

The position I held as one of the partners of the Great American Fur Company, having under my immediate and exclusive control the trade with the Indians on the west of the Mississippi River, and as a partner in the Peppin to the British Possessions on the north, and westward to the dividing ridge between the Minnesota and Missouri Rivers, enabled me to combine business with pleasure. There were many trading posts established at intervals through the country, which must be occasionally visited and inspected by me in person, and I performed these journeys on horseback, with a single French Canadian voyageur as my attendant, depending upon our guns for food. We sometimes found it convenient to pass the night in the traders' cabins at such locations or in a Sioux lodge, but more frequently our camp was made in the open air, in a grove where wood could be obtained.

In 1847 I determined to explore the country north of the Minnesota River and west of what was termed the Big Woods, very little being known by the whites about it. There accompanied me eight white men and mixed bloods,

and after much persuasion I induced a Sioux Indian named *Down*, or the *Singer*, to act as guide to the party, promising him protection in case we fell in with Chippewas, with which tribe the Sioux were at war, and a liberal compensation for his services if he proved himself competent and faithful. We were all mounted on tough and serviceable horses, and we relied upon our arms to furnish us with food. We crossed the Minnesota River at the Little Rapids, about forty miles above Mendota, without serious difficulty, the water being shallow. We then entered the woods, and traversing them under the direct guidance of the guide, we emerged upon the prairie on the following day. The month was October, the woods and prairie had assumed the hues of autumn, and the weather being warm and pleasant, the party having secured sufficient game for supper, were in a merry mood, and made good headway towards the northwest. Deer and bear sign was plentiful, but the Indians had lately hunted there and killed or driven the animals away. The next day we traveled industriously, but fell in with no game of any kind, and we reached a lake, bordered by a thick growth of poplars, where it was decided to encamp for the night. Having eaten nothing during the day, and without provant for supper, the situation was anything but cheerful. The sun was disappearing in the west, when to our delight we heard among the poplars the peculiar chuckle of ruffed grouse when preparing to roost; and they were soon discovered and fifteen of them secured, which afforded a very satisfactory meal. That was the only day that there was scarcity of food during the entire trip, deer and water fowl being abundant. The route was continued along the verge of the forest until about noon of one of the days, we saw in the distance on the prairie a herd of elk, consisting of a hundred or more, lying down on the top of a hill. How to stalk them with success was the problem to be solved. There was but one chance in a score that it could be done, but I determined upon a trial. Leaving the rest of the party to care for the horses, none of which were fast enough to overtake the elk, I took with me a young half-breed and Down, and started on foot. We were compelled to make a march of three or four miles to reach the only point from which there was any chance of success. The hill where the animals lay was precipitous on the side where we found ourselves, and if the valley between us could be safely crossed, we would be sheltered from sight by the brow of the hill. Stripping ourselves of all superfluous articles, we wound prairie grass around our bodies and crowned our heads with it. I kept the half-breed with me, and told Down to crawl at a little distance in a parallel line with us, but under no circumstances to fire a shot or show himself until I arrived at the proper spot. I then advanced very cautiously, and the grass for a distance of four or five hundred yards, and had reached the sheltered spot without alarming the game, when, to my unspeakable horror and indignation, I saw the miserable savage Down rise from the ground, run rapidly up the hill, and discharge his double barrel. I was near enough to the herd for a certain shot, but the rising ground intervened, shutting it out from my view. I ran at full speed toward the Indian, intending to beat him soundly, but he was a fleet runner, and when I reached him he was in full chase of the elk and almost a gun-shot ahead of me. I felt like putting a bullet through the wretch, but he did not make his appearance among us until late at night, and my wrath had then subsided. What he had been doing in the meantime no one could tell, but when I questioned him the next morning he said he had followed an elk he had wounded, but did not succeed in overtaking it. I abused him heartily for his misconduct, and asked him why he had not waited for me before shooting. He replied that he could not see me in the grass, and I abused him about the chase. When the fellow failed to secure at least two of the herd, I could not conceive, for he was within twenty yards of them when he discharged his gun. I have oftentimes had my patience tried by the stupidity of fellow-hunters, or of my men, when instructed to perform some task requiring tact and caution in approaching game, but nothing ever occurred to me more irritating than the case I have related. We fell in with other elk in small numbers during the trip, but the country was so favorable to the elk that I should have taken them with our horses on one occasion proved a ludicrous failure.

After reaching the valley of the Sauk River and looking with pleased eyes upon a beautiful sheet of water, now known as Osakis Lake, and celebrated for the abundance and excellence of the fish it contains, the weather changed, threatening a storm, and I determined to return homeward by a more westerly route. On the second day thereafter a huge bear was killed by one of the party and the carcass proved a god-send to us, as I had no abundance of provisions, which since two entire days, overtook us and drove us to the shelter of the woods. Hunting was out of the question while the snowfall continued, and we had to make ourselves and our poor animals as comfortable as the paucity of covering material would permit. The large kettle of sheet-iron was kept upon the fire and supplied without intermission with the meat of the bear, which was our only recourse. The amount consumed by the party of nine while thus snow-bound was simply prodigious, there being little of the bear left when the wolves when we departed. Our course led us through the Kandiyohi region, noted for the size and beauty of its lakes and the fertility of its soil. The party arrived without accident at their homes, after an absence of twenty-two days, the only incident worth mentioning being the bagging of four large geese on the wing by the writer by a single discharge of his gun on horseback.

I first came to St. Peter's, now Mendota, in the fall of 1834, the trip from the mouth of the Chippewa River being a long and distant, having been performed in company with a gentleman named Bailly, two hired voyageurs and a half-breed boy, all of us being mounted. I have heretofore given some details to the readers of *The Spirit of the Times* of the journey, which was fruitful of incidents, some ludicrous and some grave. Soon after my arrival I visited Fort Snelling and presented letters of introduction, with which I had been furnished by my army friends elsewhere, to the officers, and they secured me a place at once at the society at that post. Thearrison was composed of five companies, with nearly a full complement of officers, several of whom had their families with them. There were four lieutenants, W., McC., P. and G., who, like myself, were unmarried, and who had formed themselves into a club, which they called the *bole-screw*. These youngsters were disposed to be fast, and some of their pranks were annoying to Major P., the staid and somewhat austere commandant, verging as they did upon insubordination and disrespect to the officers, and their authors were amenable to the penalties of a court-martial. The two first and last whose initials are given met with an early death, the third fell a victim to yellow fever at Vera Cruz subsequent to his surrender to Gen. Scott.

After the lapse of several years Captain Martin Scott, fa-

mous as the best shot of his time, in or out of the service, was assigned to the command of Fort Snelling and he brought with him a score or more of thoroughbred dogs of different kinds. I had in my own kennels twenty-two canines, at the head of which was the matchless Lion, an Irish wolf dog, immortalized by Frank Forrester in his published works and in late years by Mrs. Jessie Benton Fremont in the columns of the *New York Sportsman*. The tastes of the new commandant and myself were so similar that it is not strange we became friends, and that the dogs of the two camps found in our friendship, which lasted uninterruptedly until his death. He fell, as we all know, at the head of his regiment, while gallantly performing his duty on the bloody field of Molino del Rey, in Mexico, in the year 1847.

The Captain and I frequently hunted grouse on the prairies, and in the winter season we made fierce war upon the wolves and foxes which were attracted by the offal from the post. When we took the field with more than two score dogs there was music in the air and small chance indeed for any of the scavenger beasts in the neighborhood. There was a large timber wolf, distinguished by his size and by his peculiar dark color, which had baffled every attempt of Captain Scott and the other sportsmen at the fort to capture, although they had fleet greyhounds in their pack. I told these gentlemen that my dogs could catch and kill that brute, but they were utterly incredulous. It was arranged that I was to be advised when next the wolf put in an appearance, and my many days passed before the notice was served upon me. My four score dogs were forthwith saddled and I crossed the Minnesota River with my dogs, and was soon in full chase of the animal, which was so confident in his own powers that he disdained the shelter of the woods and took his course, much to my delight, across the prairie. Suffice it to say that Lion and his brother Boston overhauled the wolf after a short race of three miles and pinned him to the ground. When I reached the spot the wolf was in the agonies of death, and in a few moments ceased to breathe. I attached one end of my long silk sash to the loop in my saddle and, holding the other end to the wolf's neck, and thus controlling it, I dragged the heavy carcass over the smooth prairie to the fort and exhibited it, to the discomfiture of the disbeliever and the triumph of my noble dogs.

On another day I received an urgent message from the Captain, by his orderly, requesting me to cross over with my dogs, as he had two wolves corralled upon the large island below the fort. I forthwith complied, and on my arrival I found the Captain had placed an entire company of soldiers along the shore of the straitly and I swept the escape of the wolf. The island was surrounded by open water except on that side. We went over on the ice, found and killed one wolf, and the other only evaded the onset of the dogs by plunging into the water, when he was carried by the swift current, despite all his struggles, under the ice.

My armory contains one rifle and three double guns, each of which recalls to my mind incidents of much interest in which it has played a prominent part. There are missing from my two double guns, one of plain metal, and one of which I purchased from Capt. Scott on the eve of his departure for Mexico. It was his favorite arm, and I used it with great care for several years and finally presented it to a warm friend, since deceased. It is now in the possession of his son, by whom it is valued as a family relic. The other was, next to my Willmot, the weapon I most relied on for ordinary shooting. It is responsible for the death of innumerable victims, from the lordly bison, through the gamut, down to the tiny jacksnipe. The excellence of its shooting was so well vouched for by our able and worthy Commissioner of Agriculture, my old friend General W. G. Le Duc, who witnessed divers feats performed with it in the field. I lent it to a fellow sportsman several years since and have never been able to recover it, which I very much regret, for that arm was my reliance in many a strait and never failed me.

There was enough of danger attendant upon the sports of my earlier years in this country to add zest and excitement to their pursuit. Albeit the great bands of Dakotas or Sioux whom the most part of the sportsmen of that time feared, being that they had no blood of white men upon their hands, they were the Ishmaelites of the plains, regarding every red man who was not a Dakota as *prima facie* an enemy, and entitled to no mercy. The other tribes of course retaliated, and the white hunter was exposed to the peril of meeting their war parties, and of being robbed of all his property, if indeed he was fortunate enough to escape without the loss of his scalp. To say nothing of his liability to break his neck or his limbs by being thrown from his horse while chasing the larger game or by being broken and unfavorable ground, he was often in peril from the head long charge of a wounded bull (the writer himself having barely escaped with his life in an encounter of this sort, related in Porter's edition of "Hawker"). It must be borne in mind that the buffalo of the olden time was by no means the poor creature he now is, rendered spiritless and timid by the incessant reports of the repeating rifles in the hands of his persecutor. The savages seldom used carcasses in the chase, depending upon the equality of deadly but silent work of the bow and iron-pointed arrow, which caused little alarm among the great herds. It needed little provocation to ensure an attack from the males even when unwounded, but the sting of a ball or an arrow, when not instantly fatal, was sure to be followed by a furious charge upon the assailant, and several Indians within my own knowledge fell victims to such onset. The stately bull regarded himself as the master of the plains, and was ready to do battle for the supremacy with any of the Prairie fires, where the buffalo were few, and the dread of the hunter's spear driven before the gale it required the utmost exertions and skill of the most experienced to save person and property from the flames.

The transformation which has taken place in the vast country referred to as the scene of my early adventures in less than a generation is almost inconceivable. The white settlements were few in number, and confined mainly to that part of Minnesota's territory east of the Mississippi River. Where the buffalo were few, and the dread of the hunter's spear driven before the gale it required the utmost exertions and skill of the most experienced to save person and property from the flames. The transformation which has taken place in the vast country referred to as the scene of my early adventures in less than a generation is almost inconceivable. The white settlements were few in number, and confined mainly to that part of Minnesota's territory east of the Mississippi River. Where the buffalo were few, and the dread of the hunter's spear driven before the gale it required the utmost exertions and skill of the most experienced to save person and property from the flames. The transformation which has taken place in the vast country referred to as the scene of my early adventures in less than a generation is almost inconceivable. The white settlements were few in number, and confined mainly to that part of Minnesota's territory east of the Mississippi River. Where the buffalo were few, and the dread of the hunter's spear driven before the gale it required the utmost exertions and skill of the most experienced to save person and property from the flames.

multitudes of geese, brant and ducks, affording fine sport to the many possessors of breech-loaders in all parts of the State. My old, peaceable and well disposed Dakota friends after being made the victims for long years of broken promises, violated treaties and bad faith generally on the part of the government, were at length converted into cruel and thirsty savages who spread desolation and death along the frontiers of Minnesota and Iowa in 1862 and 1863, until, routed in successive engagements by the Minnesota forces under the command of the writer, many of them were captured and executed, and the remainder sought refuge in the British Possessions and across the Upper Missouri River there to await the fate which has befallen the Indian tribes successively as the wave of white immigration has reached and destroyed them.

In view of the benefits conferred upon the human race by the opening of this new Northwest to white settlement, the true sportsman will not regret that he has been deprived of many sources of pleasure thereby. He can still find opportunities for the display of his skill, even in the most populous parts of the State, although his sport will not be so perilous and exciting as was the chase of the greater and fiercer animals in the old time.

St. Paul, Minn., 1880.

HAL A. DACOTAH.

Natural History.

OUR WATERFOWL.

Ducythala clangula. Golden Eye, Garrot, Whistler. Male, head puffy, dark glossy green, except white oval spot beneath and in front of the eye, which touches the base of the bill. Lower neck, under parts, a patch on the shoulder, most of the scapulars and wing coverts white; other upper parts black; tail, ash; bill, black; feet, yellow; length, over sixteen inches. The female has the head dark brown without white markings, and has the breast and sides gray, the black of the back replaced with dark gray.

The Golden Eye, or Whistler, as it is more often called on the Atlantic Coast, is abundant during the migration all through the Eastern States, but is not so numerous west of the Mississippi River. We believe that it has not been found in the Missouri River region, though it probably occurs in small numbers at some points in the Rocky Mountains, having been reported from that region in *FOREST AND STREAM* by Mr. Morton Grinnell.

The flesh of the Whistler is not regarded as particularly delicate, though much better in this respect than that of some of the species to be hereafter mentioned. It does not by any means confine itself exclusively to an animal diet, and sometimes feeds on corn and other grain. It is very expert at diving, and single birds, found feeding near the shore, may often be approached by running toward them while they are beneath the surface, and then dropping flat on the ground when they come up again. The Whistler sometimes comes up well to decoys, but we have usually found it rather an uncertain bird in this respect.

Bucephala islandica. Barrow's Golden Eye, Rocky Mountain Garrot. This species bears a very close resemblance to the preceding, but is generally regarded as a valid species. In the male the white loreal spot is larger than in *B. clangula*, triangular in shape, with one of its sides touching the whole side of the bill at the base. The white on the wing is divided by a dark bar. Otherwise similar to *B. clangula*. The female is with difficulty to be distinguished from the last, but perhaps has the dark bar across the white of the wing.

Barrow's Golden Eye was regarded by Audubon as the specimen plumage of the common Whistler. It appears to be much more Arctic in its distribution than that bird, and is everywhere rare in the United States. Its southern limit during the winter is given as New York, but on the shores of Canada it is said to be not very uncommon during that season. It has been taken in the Rocky Mountains by Mr. Henshaw as far south as Utah, though not abundant there. But little is known of its habits, and its breeding place is supposed to be in the Far North.

Bucephala albeola. Buffle Head, Butter Ball, Spirit Duck, Dipper, Salt-Water Teal. The male has the colors generally as in the Golden Eye. Head extremely puffy, iridescent, with green, gold and white reflections, without the white loreal spot, but with a white patch reaching from behind the eye backward, meeting its fellow of the opposite side behind. Female grayish or slate color where the male is black, with a trace of the white head patch.

The little buffle head is well known to every one who uses the gun, and needs no extended description. The full plumaged male is a very beautiful bird, while the female is, as Dr. Coues remarks, "an insignificant duck," in striking contrast to her highly colored mate. The buffle head is an expert diver and a very swift flyer. It does not often, on the Atlantic Coast, pay much attention to decoys. It is rather unsuspicious, and one may often row a boat up to within gunshot of the feeding flock.

This species is found almost everywhere throughout the United States, and in winter is very common. Although by far the greater portion proceed to the British Possessions to rear their young, yet we found them breeding in Montana in the summer of 1874. No nests were found, but many broods of young still unable to fly were seen, and a number of specimens taken. This, we believe, was the first record of the breeding of this species within our territory.

Harleia glacialis. Long-Tailed Duck, South Southerly, Old Wife, Old Squaw. Tail of fourteen narrow, pointed

feathers; in the male the central ones very long and slender, about equalling the wing in length. The nail of the bill occupies the whole tip. The plumage in winter different from that of the summer. Male in summer has the back and the long narrow-pointed scapulars, varied with reddish brown, but changing in winter to white or pearl gray. General color, black; below, white from the breast back; sides of head gray. In winter the head, neck and upper breast are white, but the gray cheek patch remains, and there is below it a larger dark area. Bill black, with a yellow or flesh-colored bar toward the tip. The female is an ordinary looking grayish bird, without the long tail feathers or scapulars, but may be known by the shape of the bill, the patches on the head and neck and the wing without any white. Length varies with the length of the tail feathers from fifteen to twenty inches.

The Old Squaw, as it is usually called on this coast, is one of the most truly maritime of our ducks. It is very rarely seen except on the salt water, and seldom ventures even into the mouths of rivers except when wounded. There are a few instances recorded of its capture on inland waters—for example, on the great lakes—but these, in view of what is known of its range, can only be regarded as accidental occurrences. During the winter it is extremely abundant along our whole New England coast, and from the constant clamor that the birds keep up is derived the popular name, Old Wife. The title South Southerly is given it from a fancied resemblance of its cry to these words, but to make them at all like the note of the Old Squaw, the two first syllables must be spoken rapidly, and the third strongly accented.

The old squaw, though its flesh is very poor eating, is shot in great numbers along the coast, and being a bird of rapid and somewhat irregular flight, affords very good sport. In the spring this species comes up well to decoys, and we have known of over sixty being killed in this way during a morning's shooting. The favorite method of killing them, however, is by forming a line of boats between the feeding grounds and the outer water, where they pass the night, and shooting them as they fly over. They rarely rise to any great height, and as the boats are stationed only about a gunshot apart, many good opportunities are given the gunner. This method of shooting is also practiced with success for coots. It has been more than once described in these columns. The Old Squaw retires to the North to breed, and is said to rear its young on the fresh-water lakes of Labrador. We have good reason to believe that it sometimes breeds on the Connecticut coast, but it is probable that the birds which do so are wounded ones, which are unable to make the long journey to the North. This species is found on the Pacific coast, and is also a common bird of northern Europe.

Camptolanius labradorius. Labrador Duck, Pied Duck. Bill extended toward the end by membranous expansion; cheek feathers rigid and somewhat scale-like. The male has the body and wing-tips black, a black collar about the neck, and a longitudinal black stripe along the crown of head; elsewhere white. Female, slaty gray; length, about two feet.

The Pied Duck is not spoken of by older writers as an uncommon species, but is now extremely rare. It is difficult to understand what can have caused the disappearance of this bird, but the fact remains that specimens now scarcely ever find their way into the collector's hands. During the last ten years we have never seen but one individual (a young male) in the flesh.

Sportsmen, therefore, who may be fortunate enough to secure specimens of this species would do well to have them preserved, and to record the fact without loss of time. According to Audubon the Pied Duck is a truly marine species, and rarely enters rivers. It is said to occur as far south as the Chesapeake Bay.

[TO BE CONTINUED.]

MIGRATION OF THE WAGTAIL.

THE following letter contributed pseudonymously to the *Evening Post* contains much that will be new to most of our readers. The account is so interesting and so pleasantly written that we reprint it entire in the hope that it may elicit some expression of opinion on the subject from our own ornithologists:

In the autumn of 1878 I spent several weeks on the Island of Crete. On several occasions the papas—village priest—a friendly Greek with whom I spent the greater part of my time—frequently directed my attention to the twittering and singing of small birds which he distinctly heard when a flock of sand cranes passed by on their southward journey. I told my friend that I could not see any small birds and suggested that the noise came from the wings of the large ones. This he denied, saying, "No, no! I know it is the chirping of small birds. They are on the backs of the cranes. I have seen them frequently fly up and alight again, and are always with them when they stop to rest and feed." I was still skeptical, for with a field-glass I failed to discover the "small birds" spoken of. I inquired of several others and found the existence of these little feathered companions to be a matter of general belief among both old and young. I suggested that possibly the small birds might go out from the shore a short distance and come in with the cranes. "No," was the general answer, "they come over from Europe with them." I certainly heard the chirping and twittering of birds upon several different occasions, both inland and out upon the sea. But in spite of the positive statements of the natives, I could not believe their theory until convinced one day while fishing about fifteen miles from the shore, when a flock of cranes passed quite near the yacht. The fishermen, hearing the "small birds," drew my attention to their chirp-

ing. Presently one cried out, "There's one," but I failed to catch sight of it. Then one of them discharged his flint-lock. Three small birds rose up from the flock and soon disappeared among the cranes.

I subsequently inquired of several scientific men, among whom were two ornithologists, as to the probability of such a state of affairs. They all agreed that it could not be, and I, too, was forced to cling to my original judgment, and let the matter go. Recently, however, while reading the "Gartenlaube," my attention was attracted to an article bearing directly upon the subject. The writer, Adolf Ebeling, tells the same story, and adds the statements of some ornithologists of distinction, which makes the whole matter so striking and interesting that I quote the paragraph from his book:

"Shortly after my arrival in Cairo I greeted various old German friends among the birds that I observed in the palm-garden of our hotel. First, naturally, was the sparrow, the impudent proletarian—I had almost said social democrat, he used the whole world to-day has that bad word in the mouth. He appeared to me to be more shameless than ever on the land of the Pharaohs, for he flew without embarrassment on the breakfast table, and picked off the crumbs and bits from every unwatched place. But the mark of honor we paid to the wagtails, and in truth chiefly because we did not then know that the wagtails were birds of passage. We had thought that they passed the winter in Southern Europe, or at farthest, as many of them do, in Sicily and the Grecian Islands. That they came to Africa, and especially to Nubia and Abyssinia, was then unknown to us. This appeared to us singularly strange, nay, almost incredible, particularly on account of the peculiar flight of the wagtails, which it is well known always darts intermittingly through the air in longer or shorter courses, and apparently, every few moments, interrupts its flight to sit again and 'wig its tail.' But there was the fact, and could not be denied. Everywhere in the Gardens of Cairo you could see them under the palms that border the banks of the Nile; on the great avenues that lead to the pyramids; nay, even on the pyramids themselves in the middle of the desert. And there it was that I first heard of this singular phenomenon.

"One evening we were sitting at the foot of the pyramid of Cheops, sipping our cup of fragrant Mocha and in jolly conversation, rolling up clouds of blue smoke from our Korani cigarettes. We were waiting for the sinking of the sun to make our return to Cairo. The deep silence of the surrounding desert possessed something uncommonly solemn, only now and then broken by the cry of a desert hawk or a pelican hawk far above us. Still higher the pelicans were grandly circling. Their flight, though heavy when seen from afar, possesses a majesty in the distance attained by no other bird. Right before us several wagtails were hopping around and 'flitting.' They were quite tame, and flew restlessly hither and thither. On this occasion I remarked, 'I could not quite understand how these birds could make the long passage of the Mediterranean.' Sueti Bedouin heard this from our interpreter. The old Bedouin turned to me with a mixture of French and Arabic as follows, which the interpreter aided us to fully comprehend:

"Do you not know, Hadretch (noble sir), that these small birds are borne over the sea by the larger ones?"

"I laughed as did our friends; for at first we thought we had misunderstood him; but no; the old man continued quite naturally:

"Every child among us knows that. These little birds are much too weak to make the long sea journey with their own strength. This they know very well, and, therefore, wait for the storks and cranes and other large birds, and settle themselves upon their backs. In this way they allow themselves to be borne over the sea. The large birds submit to it willingly; for they like their little guests, who by their merry twitterings help to kill the time on the long voyage.' It appeared incredible to us. We called to us a pair of brown Bedouin boys, pointed out the wagtails to them and inquired:

"Do you know whence come these small birds?"

"Certainly," they answered. "The Abu Snad (the stork) carried them over the sea."

"At supper in the Hotel du Nil, I related the curious story to all present, but naturally enough found only unbelieving ears.

"The only one who did not laugh was the Privy Councillor Heuglin, the famous African traveler and, excepting Brehm, the most celebrated ornithologist of our time for the birds of Africa. I turned to him after the meal, and inquired of his faith. The good, royal councillor smiled in his caustic way, and with a merry twinkle remarked: 'Let the others laugh; they know nothing about it. I do not laugh, for the thing is known to me. I should have recently made mention of it in my work if I had had any strong personal proof to testify it. We have been much more careful in such things than a mere story-teller or novel-writer; we must have a proof for everything. I consider the case probable, but as yet cannot give any warrant for it.'

"My discovery, if I may so call it, I had kept to myself, even after Heuglin had thus expressed himself, and would even now maintain silence on the subject had I not recently discovered a new authority for it."

I read lately in the second edition of Petermann's great book of records the following passage:

"Professor Roth, of Munich, related to me in Jerusalem that the well-known Swedish traveler, Hedenberg, made the following interesting observation on the Island of Rhodes, where he stopped. In the autumn tide, when the storks come in flocks over the sea to Rhodes, he often heard the songs of birds without being able to discover them. Once he followed a flock of storks, and as they lighted he saw small birds fly up from their backs, which in this manner had been borne over the sea. The distance prevented him from observing to which species of singing birds they belonged."

Thus wrote the famous geographer, Petermann. Professor Roth and Hedenberg and Heuglin are entirely reliable authors. This was a matter of great curiosity to me, and after I found others had made similar observations, and expressed them in print, I thought they would be of no less curiosity and interest on this side of the Atlantic, and equally deserving of publication. I hope that compositors, authors and experts may be excited by this to extend their observation in this line also. The instinct of animals is still, in spite of all our observations and experience, almost a sealed book to us. By a little attention we might hear of still more curious things in this field.

PROCEEDINGS U. S. NAT'L MUSEUM.—Volume II. of the proceedings of the U. S. Nat'l Museum, for 1879, published under the direction of the Smithsonian Institution, contains a vast amount of new and varied information. Messrs.

Goode and Bean, either severally or jointly, contribute a very considerable portion of the matter published in the volume, and their investigations comprise the fishes of Alaska as well as those of Florida and the Gulf of Mexico.

The fourth installment of Dr. Cones' Ornithological Bibliography, which appears here, relates strictly to faunal publications which treat of British birds, and will be of the greatest value to ornithologists abroad as well as in this country. The present volume also contains valuable papers by Dr. Jordan, the late Dr. Brewer, Mr. Oscar Hanger, Dr. Kidder, U. S. N., Dr. Merrill, U. S. A., Professors Verrill, Smith and White, and a number of others.

We shall have occasion to speak further of this volume at a future day.

SOCIETY OF AMERICAN TAXIDERMISTS.—The first competitive exhibition of the Society of American Taxidermists is now being held in Rochester, New York. The exhibition is being held at No. 62 State street, in that city, and is said to be very fine, no less than twenty-five of the members having specimens of their work on view. The judges are Prof. J. A. Allen, of Cambridge, Mass., Dr. J. B. Holder, of New York, and Mr. W. E. D. Scott, of Princeton, N. J. The following is a list of the prizes to be given:

To best piece in entire exhibition, silver medal. To second best piece in entire exhibition, bronze medal. To best general exhibit, bronze medal. To second best general exhibit, diploma of honor. To each exhibit in Class A—Taxidermy proper—which shall stand at 85 or over, diploma of honor. To each exhibit in Class A which shall stand at 75 and under 85, a certificate of merit. To grotesque groups and animals grotesquely mounted, diplomas and certificates will be awarded at the discretion of the judges. To the handsomest article of ornament or use, a diploma. To the best artistic article of ornament or use, diploma. To the best exhibit of accessories to Taxidermy in each section, diploma. To second best in the same, at the discretion of the society, certificate.

THE GEOGRAPHICAL SOCIETY AT RAY—New York, Dec. 14.—*Editor Forest and Stream:* In one of the recent bulletins of the American Geographical Society, an address, delivered before it by the Earl of Dunraven, is published under the title of "Moose and Caribou Hunting in Colorado." The worthy member who superintends or edits the publications of the Society may be a most excellent geographer, but his knowledge of natural history is lamentably deficient. Moose and Caribou in Colorado! Well, that will be a revelation to the brotherhood of sportsmen and naturalists, as it most assuredly will be to the noble Earl, who is accredited with the address, for there is no man who speaks with more authority upon moose and caribou than the Earl of Dunraven. How he will wince when his friends tell him about moose-hunting in Colorado; and what misconceptions will prevail among those ignorant heretofore that this noble deer is to be found in that State, for the seal of authority of so eminent a body of scientists could not well be disputed! Let me advise the Society to call in this publication.

NATURALIST.

SNAKE SWALLOWING ITS YOUNG—Baltimore, Dec. 14.—*Editor Forest and Stream:* In the summer of 1877 I was spending my vacation in the country. One afternoon several boys and myself took a walk, and while returning we saw a snake which was getting out of our way, so we prepared for battle, and came out victorious in a little while. The snake was not very long, not over fifteen inches in length, but it seemed to have a lump in the abdomen, and on taking it to the village store the storekeeper said he (more likely she) had swallowed a toad. We then determined to dissect it, and on procuring a knife ripped it open, and to our surprise found it to contain twenty-two small snakes of the same species. They were all alive and about six inches in length. Where did they come from? The species was *Eutania striata*, or Garter snake.

F. G. NIEWIARSKI.

AN ALBINO RAT.—A correspondent sends us a clipping from the Cincinnati *Enquirer* which is as follows: A curiosity is on exhibition at Firth's drug store at this place, Madison, Ind. It is in the shape of a full-grown milk-white rat, with pink claws and jet-black, bead-like eyes. He was caught by Robert Quail, of Brookings, in a trap.

Sea and River Fishing.

WHICH SALMON IS BEST?—We find the following question and answer in the *Deutsche Fischer Zeitung*, of Stettin, Germany, "Is the California salmon equal in quality with the salmon of the Elbe or the Oder?" What is the relative rank of the following fishes in regard to flavor—Rhine, Elbe, Oder, Vistula, North Sea, Northern, Swedish, Californian and Canadian, and which are best to smoke? Answer: Who is in position to have all these different sorts upon his table? This can only be answered by the largest fish dealers. Some idea may be formed from the price. The Rhine salmon is, above all, the first, finest and fattest. The Californian salmon comes to us only preserved in boxes and is not found fresh in our markets. Those here are for breeding salmon, and so are of great value and cannot be compared. The North Sea salmon are like the Elbe and Weser salmon. At the Fishery Exhibition in Berlin there were fish from Sweden labeled "Waener salmon," which must be lake trout, *Trutta lacustris*, that do not go into salt water. The "strandlachs," or "silverlachs," of the North Sea is the sea-trout, *Trutta trutta*, and are very good. For smoking the best will show themselves the best. We will be thankful if we can obtain further information from our circle of readers."

This question has been raised in America, but California is so distant from Eastern markets that the salmon have to be sent in refrigerators and do not appear so well. Natives of California claim excellence for their fish.

* In German markets the name of the river is always appended to the salmon, as "Rheinlachs," "Oderlachs," "Elbelsch," etc., and the fish from certain rivers have the call letter prices. They claim to distinguish the fish even when smoked.

BASS FISHING IN CENTRAL NEW YORK.

SYRACUSE, Nov. 29.

I HAVE had so much pleasure in reading your fishing correspondence that I feel like evening the thing up to-night; because if we who enjoy the tales of others' fun don't tell a story or sing a song, we don't deserve to remain in the company.

We have some good bass grounds right here, and all around this Salt City. Baldwinsville, Fulton and Minetto, on the S. & O. R. R., Tully Lake, on the S. & B.; Oak Orchard, Brewerton and Caughdenoy, on the Syracuse Northern, the "Wide Waters" (reached by the N. Y. Central to Kickville, and then by foot or wheels for a couple of miles) are all places of note among our bass catchers. And if one doesn't care to go more than a street car's journey, let him "take in" Onondaga Lake, he can take out plenty of bass. Your penman saw one string during the past summer that contained an aggregate of about twenty-three four-pounders. This catch was made in an afternoon by two fishermen, one using grasshoppers and crabs for bait, and the other enjoying the fun much more without a bit of bait, landing two of the "big uns" and a fair share of the mess.

But what I had in mind was to relate the adventures of three Syracuseans at Caughdenoy (pronounced "Cokkynoy" by the people thereabouts) one day last August. This is a little hamlet on the Onondaga River, and its existence is due chiefly to reeds. The river along there is from three to five feet deep—just right for wading. The reel catchers have erected their weirs through about half a mile of the river, where the bottom is composed of good-sized stones and gravel. That is the sort of bottom where we expect to find the big mouth, or "Oswego" bass in this region, and the riffles made by the reel weirs make the place look like a fly-fisherman's paradise.

Our trio took the evening train from here for Brewerton, fifteen miles, and went to bed at Wadsworth's. We had made arrangements with "Georgie," the ownerman, to be on hand at four the next morning with all the necessities for the day, including bait, tackle, cooking utensils, pork, potatoes, coffee, etc., etc. In the morning by the first light, and a little sooner we were on our way down the four-mile stretch of river, with our trolling spoons out. We didn't catch a pike or a pickerel, but Prof. P. made some excellent shots with his carbine. It was no doubt fun for him, but the little "tip-ups" he slaughtered were no good for dinner, and seemed to be enjoying themselves along the shore before meeting with those bullets.

We got to the reel weirs soon after old Sol showed his broad face, and prepared for biz. Two of the party waded in with their rods and flies, while the others remained in the boat to see how the chub, bass, pickerel, pike and what-not (don't know the scientific name) liked their style of handling bait.

About seven o'clock we all met on narrow island between the river and the "cut" where George was ready for us with a large fire of glowing coals, with cups, plates, knives, forks, etc., laid out on the grass in a shady spot, "duly waiting" for the fish to arrive. Well, we had enough! But you have all had a fish breakfast under similar circumstances, so why make you wish that winter was over by dwelling on the scene? Doesn't it seem as though the whole inner man must be a vast stomach when you come to think over what can be laid away at such a time?

It was a pretty hot day, and George was ready for us with a large fire of glowing coals, with cups, plates, knives, forks, etc., laid out on the grass in a shady spot, "duly waiting" for the fish to arrive. Well, we had enough! But you have all had a fish breakfast under similar circumstances, so why make you wish that winter was over by dwelling on the scene? Doesn't it seem as though the whole inner man must be a vast stomach when you come to think over what can be laid away at such a time?

I won't give you the figures for fear of arousing disbelief, but will state, in general terms, that we took home to our friends two baskets full. Will leave the size of the baskets to be inferred, on account of the fear aforesaid. We had enough left over, however, to make a large and juicy supper when we got back to Brewerton.

The fishing in the waters adjacent to Syracuse, Oswego and Utica is growing better every year, thanks to the efforts of the officers and individuals interested in bringing about such a state of things. The fishing club of the county of Onondaga, Oneida and Oswego mean business and the fish stealers are finding it out. I think there is no better bass fishing in the State than can be found in the lakes and rivers of this locality. Next summer I hope to just revel in it.

STENO.

THE FISHERIES QUESTION.—Professor Hind, of Windsor, N. S., who was an official of the Halifax Fishery Commission and some months ago made charges that the statistics used in the British case were false, has had printed in pamphlet form a letter addressed to the Governor-General of Canada, in which he makes charges of a broader character. He says that not only were the statistics presented to the commission false, but the official blue books of Canada bearing on the fish trade with the United States were systematically falsified for a series of years to produce results that would serve the purpose in view. Exports of the United States were made to appear much less than they really were, for the purpose of making out that the province benefited little by the free admission of fish into the States. Pictitious items of exports to foreign countries were produced to make it appear that the provinces were less dependent than they really were on the American market. Other fictitious items were inserted to make it appear that the Americans found a large market for fish in the provinces. The letter is lengthy and very elaborate and gives many comparisons and calculations leading to the conclusions already stated. It is alleged that these falsifications began soon after the treaty of Washington was made. The correct returns appear to have been sent from the various provinces to Ottawa and there to have been manipulated in the manner above stated. Professor Hind claims to be fully able to prove all he says before a committee of the House of Commons.

GIVE US A PLAIN LAW.—*Editor Forest and Stream:* I note in your last issue the decision rendered by Judge Riegel, of Syracuse, involving the right of use of "any device other than a hook and line" in the taking of fish in the fresh waters of this State, which is in exact opposition to a decision rendered in the Supreme Court, August 14, 1880, by Hon. W. C. Ruger, also of Syracuse, upon the same question, viz.: the right to use nets, weirs or seines in the fresh waters of the State. The later decision appeared in the *FOREST AND STREAM* of October 7. Now, as a most earnest sportsman,

and one desiring the fullest legal protection possible, I propose this question, in view of these recent conflicting opinions, both emanating from legal gentlemen of high standing and known ability. If the law of 1880, Chapter 531, is liable to such varied construction, should not the Legislature of 1881 revise the work of the past winter, and give us in plain and explicit terms a new, simple and effective act with relation to the protection of fish and game within this State? According to our present light, an attempt to suppress poaching or illicit hunting or fishing, under the existing law, is a good deal like tossing a penny for a decision; should it come heads we win, but if tails we lose. The law affords no positive rule, and consequently no protection. F. E. H. Oswego, N. Y., Dec. 10.

BRITISH COLUMBIA FISHERIES—Victoria, B. C., Nov. 15.—We have read so much of the great stride in pisciculture made by the United States Fish Commission in equipping a steamer to follow the fishes in their spawning and hatching them on board that we are about to apply the principle to the canning of fish, that is, to take the cannery to the fish instead of transporting the fish to the cannery. A company is about to be formed here to build a steam floating fishery, which can follow the different runs of fish from one river to another and put them up in this in the freshest possible condition. The salmon-canning business is not as good as formerly, the business is overdone to some extent and we will have to hatch more extensively before long. S. H. R.

TROUT IN OREGON.—Our correspondent, S. A. Bob, now in Empire City, Oregon, writes that he has been enjoying himself in trout-fishing in Millicoma River. Empire City is in Coos Bay, about 200 miles south of the mouth of the Columbia River and 400 miles north of San Francisco and can be reached by steamer from the latter place in forty-eight hours. He tells us that there are two runs of trout there, the first taking place in April and May and the second at the end of August. Red and yellow-bodied flies are the favorites, and during the height of the season the catch per rod will be from fifty to seventy-five fish, averaging two pounds, the largest reaching from three to four pounds. They take the fly readily and many have the appearance of the *Trutta marina*, or Irish sea trout, although other trout are plenty.

HATCHING THE GRAYLING.—Anglers will learn with pleasure that the Michigan Fish Commission are about to hatch this fish in its native streams and attempt to save this elegant fish from the extermination which threatens it from its limited range and delicate organization.

Fish Culture.

THE CENTRAL FISHCULTURAL SOCIETY.

FIRST DAY.

THE second annual meeting of the Central Piscicultural Society was held in the rooms of the Grand Pacific Hotel at Chicago on the 15th and 16th days of December, 1890. A few members gathered at 10 A. M., when, in consequence of the absence of others who were expected on later trains, it was decided not to open the session until 3 P. M. At that hour the meeting was called to order by the President, Mr. N. K. Fairbank.

The attendance throughout was small, but lacked nothing in enthusiasm and interest on that account. Members came and went as business engagements pressed them. The following were present during a part or the whole of the proceedings, the names being given in the order of their arrival: E. R. Miller, Mich.; Frank N. Clark, Mich.; Fred Mather, Forest and Stream; Prof. S. A. Forbes, Ill.; Major J. M. Crumney, Colorado; B. F. Shaw, Iowa; Wm. H. Ballou, Ill.; N. K. Fairbank, Ill.; H. W. Welsher, Wis.; J. Smith Briggs, Ill.; S. P. Bartlett, Ill.; Dr. W. A. Pratt, Ill.; H. F. Douseman, Ill.; D. Cameron, Minn.; A. E. Lytle, Wis.; E. L. Brown, Ill.; C. E. Rollins, Ill.

The following letters were read:

MUSEUM, SALT LAKE CITY, Utah, Dec. 10.
MR. PRESIDENT AND GENTLEMEN:
It would give me much pleasure to meet you at the second annual meeting of the Central Piscicultural Society, at Chicago on the 15th inst. This will not be possible, my museum duties requiring my presence here. I cordially thank you, and must content myself with reading the account of proceedings in the *FOREST AND STREAM*, which reaches me regularly and brings me into acquaintance with pisciculture and other interesting matter outside of Utah and from all parts of the world.

With hearty wishes for the prosperity of the Central Piscicultural Society, its President, to whose care I commit this letter, and success to attend its Corresponding Secretary, I remain,
JOSEPH L. BARFOOT,
Curator and Fish Com. of Utah,
EAST SAGINAW, Mich.

MR. F. MATHER,
C. E. S. C. Central Piscicultural Society, Chicago:
My Dear Sir:—Acknowledging your courteous invitation to attend the 2d annual meeting of the Central Piscicultural Society, permit me to express sincere regret that business engagements will prevent my attending, and also to assure you of my interest and hearty co-operation in the objects of your association. Fraternally yours,
H. B. RONEY,
Sec. Mich. Sportsmen's Assoc.

CINCINNATI, Ohio.
Dear Sir—I am in receipt of an invitation to attend your meeting, for which receive my thanks. I very much regret that an engagement at Washington to attend a meeting of the Board of Managers of the National Soldiers' Home prevents my attending. Trusting that at some future time I may be able to attend your meeting. I remain very sincerely yours,
L. A. HARRIS, Commissioner of Fisheries.

ELLSWORTH, Kansas.
SIR—I expected to have met with the society at its present meeting, but cannot do so. Kansas is working slow but sure advancement in the science of fish culture, although we realize our littleness in the great work that is to be accomplished by the friends of this important enterprise.

HON. M. K. FAIRBANK, President:
SIR—I expected to have met with the society at its present meeting, but cannot do so. Kansas is working slow but sure advancement in the science of fish culture, although we realize our littleness in the great work that is to be accomplished by the friends of this important enterprise.

multitudes of geese, brant and ducks, affording fine sport to the many possessors of breech-loaders in all parts of the State. My old, peaceable and well disposed Dakota friends after being made the victims for long years of broken promises, violated treaties and bad faith generally on the part of the government, were at length converted into cruel and thirsty savages who spread desolation and death along the frontiers of Minnesota and Iowa in 1862 and 1863, until, routed in successive engagements by the Minnesota forces under the command of the writer, many of them were captured and executed, and the remainder sought refuge in the British Possessions and across the Upper Missouri River there to await the fate which has befallen the Indian tribes successively as the wave of white immigration has reached and destroyed them.

In view of the benefits conferred upon the human race by the opening of this new Northwest to white settlement, the true sportsman will not regret that he has been deprived of many sources of pleasure thereby. He can still find opportunities for the display of his skill, even in the most populous parts of the State, although his sport will not be so perilous and exciting as was the chase of the greater and fiercer animals in the old time.

HAL A. DACOTAH.

St. Paul, Minn., 1880.

Natural History.

OUR WATERFOWL.

Bucephala clangula. Golden Eye, Garrot, Whistler. Male, head puffy, dark glossy green, except white oval spot beneath and in front of the eye, which touches the base of the bill. Lower neck, under parts, a patch on the shoulder, most of the scapulars and wing coverts white; other upper parts black; tail, ash; bill, black; feet, yellow; length, over sixteen inches. The female has the head dark brown with white markings, and has the breast and sides gray, the black of the back replaced with dark gray.

The Golden Eye, or Whistler, as it is more often called on the Atlantic Coast, is abundant during the migration all through the Eastern States, but is not so numerous west of the Mississippi River. We believe that it has not been found in the Missouri River region, though it probably occurs in small numbers at some points in the Rocky Mountains, having been reported from that region in *FOREST AND STREAM* by Mr. Morton Grinnell.

The flesh of the Whistler is not regarded as particularly delicate, though much better in this respect than that of some of the species to be hereafter mentioned. It does not by any means confine itself exclusively to an animal diet, and sometimes feeds on corn and other grain. It is very expert at diving, and single birds, found feeding near the shore, may often be approached by running toward them while they are beneath the surface, and then dropping flat on the ground when they come up again. The Whistler sometimes comes up well to decoys, but we have usually found it rather an uncertain bird in this respect.

Bucephala islandica. Barrow's Golden Eye, Rocky Mountain Garrot. This species bears a very close resemblance to the preceding, but is generally regarded as a valid species. In the male the white loreal spot is larger than in *B. clangula*, triangular in shape, with one of its sides touching the whole side of the bill at the base. The white on the wing is divided by a dark bar. Otherwise similar to *B. clangula*. The female is with difficulty to be distinguished from the last, but perhaps has the dark bar across the white of the wing.

Barrow's Golden Eye was regarded by Audubon as the specimen plumage of the common Whistler. It appears to be much more Arctic in its distribution than that bird, and is everywhere rare in the United States. Its southern limit during the winter is given as New York, but on the shores of Canada it is said to be not very uncommon during that season. It has been taken in the Rocky Mountains by Mr. Henshaw as far south as Utah, though not abundant there. But little is known of its habits, and its breeding place is supposed to be in the Far North.

Bucephala albeola. Buffle Head, Butter Ball, Spirit Duck, Dipper, Salt-Water Teal. The male has the colors generally as in the Golden Eye. Head extremely puffy, iridescent, with green, gold and violet reflections, without the white loreal spot, but with a white patch reaching from behind the eye backward, meeting its fellow of the opposite side behind. Female grayish or slate color where the male is black, with a trace of the white head patch.

The little buffle head is well known to every one who uses the gun, and needs no extended description. The full plumaged male is a very beautiful bird, while the female is, as Dr. Cones remarks, "an insignificant duck," in striking contrast to her highly colored mate. The buffle head is an expert diver and a very swift flyer. It does not often, on the Atlantic Coast, pay much attention to decoys. It is rather unsuspicious, and one may often row a boat up to within gunshot of the feeding flock.

This species is found almost everywhere throughout the United States, and in winter is very common. Although by far the greater portion proceed to the British Possessions to rear their young, yet we found them breeding in Montana in the summer of 1874. No nests were found, but many broods of young still unable to fly were seen, and a number of specimens taken. This, we believe, was the first record of the breeding of this species within our territory.

Harvelia glacialis. Long-Tailed Duck, South Southerly, Old Wife, Old Squaw. Tail of fourteen narrow, pointed

feathers; in the male the central ones very long and slender, about equalling the wing in length. The nail of the bill occupies the whole tip. The plumage in winter different from that of the summer. Male in summer has the back and the long narrow-pointed scapulars, varied with reddish brown, but changing in winter to white or pearl gray. General color, black; below, white from the breast back; sides of head gray. In winter the head, neck and upper breast are white, but the gray cheek patch remains, and there is below it a larger dark area. Bill black, with a yellow or flesh-colored bar toward the tip. The female is an ordinary looking grayish bird, without the long tail feathers or scapulars, but may be known by the shape of the bill, the patches on the head and neck and the wing without any white. Length varies with the length of the tail feathers from fifteen to twenty inches.

The Old Squaw, as it is usually called on this coast, is one of the most truly maritime of our ducks. It is very rarely seen except on the salt water, and seldom ventures even into the mouths of rivers except when wounded. There are a few instances recorded of its capture on inland waters—for example, on the great lakes—but these, in view of what is known of its range, can only be regarded as accidental occurrences. During the winter it is extremely abundant along our whole New England coast, and from the constant clamor that the birds keep up is derived the popular name, Old Wife. The title South Southerly is given it from a fancied resemblance of its cry to these words, but to make them at all like the note of the Old Squaw, the two first syllables must be spoken rapidly, and the third strongly accented.

The old squaw, though its flesh is very poor eating, is shot in great numbers along the coast, and, being a bird of rapid and somewhat irregular flight, affords very good sport. In the spring this species comes up well to decoys, and we have known of over sixty being killed in this way during a morning's shooting. The favorite method of killing them, however, is by forming a line of boats between the feeding grounds and the outer water, where they pass the night, and shooting them as they fly over. They rarely rise to any great height, and, as the boats are stationed only about a gunshot apart, many good opportunities are given the gunner. This method of shooting is also practiced with success for coots. It has been more than once described in these columns. The Old Squaw retires to the North to breed, and is said to rear its young on the fresh-water lakes of Labrador. We have good reason to believe that it sometimes breeds on the Connecticut coast, but it is probable that the birds which do so are wounded ones, which are unable to make the long journey to the North. This species is found on the Pacific coast, and is also a common bird of northern Europe.

Camptolenas labradoricus. Labrador Duck, Pied Duck. Bill enlarged toward the end by membranous expansion; cheek feathers rigid and somewhat scale-like. The male has the body and wing-tips black, a black collar about the neck, and a longitudinal black stripe along the crown of head; elsewhere white. Female, slaty gray; length, about two feet.

The Pied Duck is not spoken of by older writers as an uncommon species, but is now extremely rare. It is difficult to understand what can have caused the disappearance of this bird, but the fact remains that specimens now scarcely ever find their way into the collector's hands. During the last ten years we have never seen but one individual (a young male) in the flesh.

Sportsmen, therefore, who may be fortunate enough to secure specimens of this species would do well to have them preserved, and to record the fact without loss of time. According to Audubon the Pied Duck is a truly marine species, and rarely enters rivers. It is said to occur as far south as the Chesapeake Bay.

[TO BE CONTINUED.]

MIGRATION OF THE WAGTAIL.

THE following letter contributed pseudonymously to the *Evening Post* contains much that will be new to most of our readers. The account is so interesting and so pleasantly written that we reprint it entire in the hope that it may elicit some expression of opinion on the subject from our own ornithologists:

In the autumn of 1878 I spent several weeks on the Island of Crete. On several occasions the papas—village priests—a friendly Greek with whom I spent the greater part of my time—frequently directed my attention to the twittering and singing of small birds which he distinctly heard when a flock of sand cranes passed by on their southward journey. I told my friend that I could not see any small birds and suggested that the noise came from the wings of the large ones. This he denied, saying, "No, no! I know it is the chirping of small birds." They came on the backs of the cranes. I have seen them frequently fly up and alight again, and are always with them when they stop to rest and feed." I was still skeptical, for with a field-glass I failed to discover the "small birds" spoken of. I inquired of several others and found the existence of these little feathered companions to be a matter of general belief among both old and young. I suggested that possibly the small birds might go out from the shore a short distance and come in with the cranes. "No, no," was the general answer, "they come over from Europe with them." I certainly heard the chirping and twittering of birds upon several different occasions, both inland and out upon the sea. But in spite of the positive statements of the natives, I could not believe their theory until convinced one day while fishing about fifteen miles from the shore, when a flock of cranes passed quite near the yacht. The fishermen, hearing the "small birds," drew my attention to their chirp-

ing. Presently one cried out, "There's one," but I failed to catch sight of it. Then one of them discharged his flint-lock. Three small birds rose up from the flock and soon disappeared among the cranes.

Subsequently inquired of several scientific men, among whom were two ornithologists, as to the probability of such a state of affairs. They all agreed that it could not be, and I, too, was forced to cling to my original judgment, and let the matter go. Recently, however, while reading the "Gartenlaube," my attention was attracted to an article bearing directly upon the subject. The writer, Adolf Zebeling, tells the same story, and adds the statements of some ornithologists of distinction, which makes the whole matter so striking and interesting that I quote the paragraph from his work:

"Shortly after my arrival in Cairo I greeted various old German friends among the birds that I observed in the palm-garden of our hotel. First, naturally, was the sparrow, the impudent proletarian—I had almost said social democrat, because the whole world to-day has that bad word in the mouth. He appeared to me to be more shameless than ever in the hand of the Pharos, for he flew without embarrassment over the breakfast table, and picked off the crumbs and bits from every unwatched place. But the mark of honor we paid to the wagtails, and in truth chiefly because we did not then know that the wagtails were birds of passage. We had thought that they passed the winter in Southern Europe, or at farthest, as many of them do, in Sicily and the Grecian Islands. That they came to Africa, and especially to Nubia and Abyssinia, was then unknown to us. This appeared to us singularly strange, but almost incredible, particularly on account of the peculiar flight of the wagtails, which it is well known always darts intermittently through the air in longer or shorter curves, and apparently, every few moments, interrupts its flight to sit again and 'wag its tail.' But there was the fact, and could not be denied. Everywhere in the Gardens of Cairo you could see them under the palms that border the banks of the Nile; on the great avenues that lead to the pyramids; nay, even on the pyramids themselves in the hands of the Arabs. And there it was that I first heard of this singular phenomenon.

"One evening we were sitting at the foot of the pyramid of Cheops, sipping our cup of fragrant Mocha and in jolly conversation, rolling up clouds of blue smoke from our Koran cigarettes. We were waiting for the sinking of the sun to make our return to Cairo. The deep silence of the surrounding desert possessed something uncommonly solemn, and now and then the hoarse cry of the hoarse fish-larks rose above us. Still higher the pelicans were gradually circling. Their flight, though heavy when seen from near, possesses a majesty in the distance attained by no other bird. Right before us several wagtails were hopping around and 'tilting.' They were quite tame, and flew restlessly hither and thither. On this occasion I remarked, 'I could not quite understand how these birds could make the long passage of the Mediterranean.' Sheikh Ibrahim heard this from our interpreter. The old Bedouin turned to us with a mixture of French and Arabic as follows, which the interpreter aided us to fully comprehend:

"Do you not know, Hadretch (noble sir), that these small birds are borne over the sea by the larger ones?"

"I laughed as did our friends; for at first we thought we had misunderstood him; but no; the old man continued quite naturally:

"Every child among us knows that. These little birds are much too weak to make the long sea journey without your strength. This they know very well, and, therefore, wait for the storks and cranes and other large birds, and settle themselves upon their backs. In this way they allow themselves to be borne over the sea. The large birds submit to it willingly; for they like their little guests, who by their merry twitterings help to kill the time on the long voyage."

It appeared incredible to us. We called to a pair of brown Bedouin boys, pointed out the wagtails to them, and inquired:

"Do you know whence come these small birds?"

"Certainly," they answered. "The Abu Saad (the stork) carried them over the sea."

"At supper in the Hotel du Nil, I related the curious story to all present, but naturally enough found only unbelieving ears.

"The only one who did not laugh was the Privy Councilor Heuglin, the famous African traveler and, excepting Becham, the most celebrated ornithologist of our time for the birds of Africa. I turned to him after the meal, and inquired of his faith. The good, royal councilor smiled in his caustic way, and with a merry twinkle remarked: 'Let the others laugh; they know nothing about it. I do not laugh for the thing is known to me. I should have recently made mention of it in my work if I had had any strong personal proof to justify it. We must be a little more careful in such things than a mere story-teller or novel-writer would have a proof for everything. I consider the case probable, but as yet cannot give any warrant for it.'

"My discovery, if I may so call it, I had kept to myself, even after Heuglin had thus expressed himself, and would even now maintain silence on the subject had I not recently discovered a new authority for it."

I read lately in the second edition of Peterman's great book of travels the following:

"Professor Roth, of Munich, related to me in Jerusalem that the well-known Swedish traveler, Hedenborg, made the following interesting observation on the Island of Rhodes, where he stopped. In the autumn tide, when the storks come in flocks over the sea to Rhodes, he often heard the songs of birds without being able to discover them. Once he followed a flock of storks, and as they lighted he saw small birds fly up from their backs, which in this manner had been borne over the sea. The distance prevented him from observing to which species of singing birds they belonged."

Thus wrote the famous geographer, Peterman. Professor Roth and Hedenborg and Heuglin are entirely reliable authors. This was a matter of great curiosity to me, and after I found others had made similar observations, and expressed them in print, I thought they would be of no less curiosity and interest on this side of the Atlantic, and equally deserving of public notice. I hope that some discerning amateurs and experts may be excited by this to extend their observation in this line also. The instinct of animals is still, in spite of all our observations and experience, almost a sealed book to us. By a little attention we might hear of still more curious things in this field.

PROCEEDINGS OF U. S. NAT'L MUSEUM.—Volume II. of the proceedings of the U. S. Nat'l Museum, for 1879, published under the direction of the Smithsonian Institution, contains a vast amount of new and varied information, Messrs.

following the subject further, but have been requested to do so by an old subscriber to your valuable paper, one of the most successful sportsmen either in this village or this island. I was prompted to first notice the subject by recollections of my childhood, as suggested by the article on "Trapped Birds on Long Island." I have, as a farmer's boy, trapped as much game as any boy on Long Island, and have no reason to be ashamed of my ability in that direction. I have, however, never violated any law, nor would I do it, no matter how unjust the law might be.

Near where I was brought up was an old farm, on which were several low places, swamps, affording an excellent cover for game. A gentleman from your city, a well-known newspaper man, and, if I mistake not, a valued contributor to your paper, used to either the farm or the swamps in the vicinity during the hunting season. He was always welcomed by the farmers and their boys, and his departure was a source of regret to them. The sign "No Shooting Allowed on these Premises" had no terrors for him. He gunned everywhere. We boys used to tell him where quail or partridge were most plentiful, and we always knew, and it is unnecessary to add that he always found plenty of game and as a natural consequence plenty of sport. Now I shall give the reasons why he was so well treated. First, he was a gentleman, not a pirate. Second, he was a true sportsman. He knew a pointer from a setter, he did not gun with "black and tans," and never killed small game, such as robins, sparrows, etc. He identified himself with the people and interested himself while in the vicinity with local affairs. He used to riddle our hats with shot, "just for fun," shoot crows and hawks for us and occasionally give us a rabbit or odd bird that he might chance to kill. He never disturbed our traps or snares, often setting them for us. On one occasion he put a crow in a spring pole. We were delighted and appreciated the joke by showing him a flock of quail when we discovered its author. He never, to my knowledge, threw down a pair of bars, shot toward a farmer's house, nor permitted his dogs to disturb the poultry. He was a true sportsman.

In striking contrast to him are the improperly called "true sportsmen"—properly the pirates—who hire a "gunning dog," borrow an old fowling piece, and on Thanksgiving or Christmas make a raid upon the Long Island farmers. They are a disgrace to the name of sportsman, in fact a common house of dogs answers their purpose just as well.

They tramp over the farmer's fields, throw down his fences, fill his cattle with shot, shoot at his house as quick as anywhere, kill anything from a sparrow to a chicken, not sparing cats or dogs. They not only violate the game laws, but steal almost anything they can get away with. If they do not kill themselves, or get killed by some sportsman like themselves, they return to the city usually at least three-quarters drunk, with their game bags filled with stolen goods complaining because farmers' boys have captured game which they had not sufficient skill to get. Could I describe scenes which I have witnessed in smoking cars or trains returning to the city during the gunning season it would be a disgusting picture. True sportsmen know and respect the rights of land owners, and as a rule welcomed in agricultural districts, but the "visiting gunner" who does not know or regard the rights of the land owner is an unmitigated nuisance and will be eventually exterminated.

Unjust laws produce disregard for all law. If the poor farmer or his children are deprived of the right to take game (in which, if it is common property he has the first right) in their own primitive way they will do all they can to prevent the wealthy, the transient sportsman from taking with his more perfect, and therefore more deadly appliances. I know whereof I speak and I do not believe that there have been 1,000 quail caught on Long Island in traps or snares in any one year during the last twenty years. It is not the farmers, their boys, nor real sportsmen who are exterminating both game and song birds, it is piratical gunners who periodically overrun the island. The readers of the FOREST AND STREAM are, as a rule, real sportsmen, who would not prosecute a poor farmer's boy for catching such low and common game as rabbits in his primitive way "just for fun." Gentlemen are not, as a rule, at all discouraged by seeing the notice forbidding trespassers, knowing that permission can usually be obtained from the owner of the property if he is satisfied that his rights are respected. I hope you will continue your efforts to weed out "Malays running amuck" from "real sportsmen," and thereby ameliorate if you do not entirely do away with the antagonism which in many sections exists between the farmer and huntsman.

The intemperate movement in the good work must come from the sportsmen. The farmer has absolute protection in the law against trespassing, and it is his duty to bring the career of the sportsman who would hunt land game concerned to a premature end. You may be assured of my hearty co-operation in your efforts to bring about a thorough and satisfactory understanding between the farmers and true sportsmen, and I speak not for myself alone, but for a number of farmers in this vicinity and other parts of the island. J. H. GRIFFITH.
East Rockaway, Dec. 10.

I have been reading your plan of preserving game birds and making the sportsman and land owner mutually interested with much interest. Your plan is a good one and I heartily believe it will be most applicable to the various States than here in the West, although many farmers have their lands posted; in Indiana and Illinois there is very little difficulty in obtaining permission to shoot if the sportsman proceeds in the right manner. The mode of procedure should be this: If possible see the parties upon whose lands you may wish to shoot before you intend going out, and in a gentlemanly manner ask permission to shoot, assuring them that you will not shoot among or toward their stock, and will leave the fences and gates in as good condition as found. If you obtain their permission go to their houses when you go out to shoot, and let them know who it is that is shooting on their premises, and if you can spare a few pieces of the game that you have killed on their lands leave it at the house of the owner, and the next time you wish to shoot you will have no trouble in obtaining permission. This is my way of proceeding, and I have no difficulty in obtaining permission to shoot on any lands I may wish.

But there are some farmers who are very selfish, and no amount of promises of good behavior would gain you the desired permit. In such cases in almost every instance your plan of a fair remuneration would bring them over to your wishes, and would cause such men to take pains to rear and protect the birds for the shooting fee, and it is right for them to demand the remuneration if they wish it. They raise, protect and feed the birds from their crops, and no gentleman sportsman will refuse. Almost all the ill-feeling between the

sportsmen and farmers has been caused by rowdy men who have shot into stock, left fences down and gates open, having no respect for the farmer or his property. Where such cases have occurred you cannot ensure the owner for posting his lands against hunters. If they would all observe the Golden Rule in their conduct there would be much more friendly feeling between both parties. Every hunter is a trespasser upon inclosed lands, whether there is existing game law or not unless he has permission; and they should bear in mind that it is a privilege granted them, and no right that they may possess. R. E. S.
Neepport, Ind.

In reading your paper one would think that a farmer was anything but a gentleman and a law-abiding citizen. There are farmer sportsmen here who do more to protect game than all the sports of the cities. I have known them to feed quail in winter for many weeks, and to protect them from hawks and other enemies; and then to be called pot-hunters. I never saw any baggage cars loaded with snared birds or any other game; but it may be so for all I know. There is not a trap or net in this neighborhood that I know of but we have some birds here we expect to turn out next spring. All the birds that we wing here we keep and turn out in the spring to keep our stock up. It is some trouble to us to doctor them up, but we save a great many.

Our woodcock law here is a robbery to us, because all the birds leave here about the 15th of June and go North. We can't shoot them, and so Northern men get all of our birds. But we must keep still because we are farmers and don't know anything! If we raise game we look upon it as ours, but we don't want to be hogish if our friends want to come and see us they are welcome, but they must not think hard of us because we can kill more game than they can. That seems to be the most trouble. If they hunt the same way that we do they can get game too, but they are afraid of getting scratched and spoiling their hands in the briars. I hope that our city friends won't think so hard of us farmers; we are not so bad as we look. YELLOW DOG.
Keypport, N. J.

Allow me to add my name to the list of those who are willing to pay more to the farmer for quail than he can realize from trapped birds. Until real protective associations are established in every county who will employ an agent at a fair salary whose only duty will be to see that the game laws are enforced and all offenders brought to justice, it is the only way to save the quail. I know from experience that the farmer will trap quail as long as he can find a purchaser, and under the present management and enforcement of the game laws the only way is to make it an object for him to stop. Your journal has become indispensable to me. If you will send a specimen copy to Wm. Shapley, South Grange, I think he will subscribe. South Orange, N. J.

I have read with great pleasure your articles upon the establishment of new relations between the gentlemen sportsmen and the farmers of Long Island. If the scheme can successfully be accomplished—and I see no obstacle in its way you will receive the hearty thanks of many to whom the resources of Long Island have heretofore been almost a closed book. The waterfowl have been always accessible, but when one tired of marsh or beach and longed for a tramp through wood or stubble, the brave voice or almost universal posting warned him off. Please add my name to your list. Custom House, New York, Dec. 7. W. W.

OUR ROCHESTER LETTER.

ROCHESTER, N. Y., Dec. 17, 1890.

THERE is about a foot of ice covering the waters of this county, and as may well be supposed there is not much activity in deer sports. Now then a foolish duck that neglected the warning of instinct to get his shot on the shore of Lake Ontario, or on the rapids of some stream, not yet covered with ice. The wild fowl that remain here are hard pressed by the severity of the weather, as was demonstrated one day this week when two flocks of ducks dropped in the water of the reservoir that supplies the city, and which is within the city limits. On the same day a flock of wild geese were seen hovering over the reservoir as if they would have taken their wings in its water, which it comes from a deep-water lake, the congeling influence of the frost long after other quiet sheets of ice had been laid over with ice. The wild fowl that remain here are hard pressed by the severity of the weather, as was demonstrated one day this week when two flocks of ducks dropped in the water of the reservoir that supplies the city, and which is within the city limits. On the same day a flock of wild geese were seen hovering over the reservoir as if they would have taken their wings in its water, which it comes from a deep-water lake, the congeling influence of the frost long after other quiet sheets of ice had been laid over with ice.

In this county a law passed by the Supervisors prohibits grouse and quail shooting for three years from the autumn of 1879. This operates to prevent any shooting near the city, except by the few who go out for hares, of which there is, or was, a good supply this season. Hunting them with ferrets has reduced the number greatly, since the snow enabled the hunters to track them to the burrows, and there is every prospect that the selfish and short-sighted ferreters will "kill the goose that laid the golden egg," by exterminating the breeding hares, and so spoil their sport for future years. The markets are full of "cotton-tails," and examination not revealing any shot wounds on them, the inference is that they have been snared or taken in bags with the aid of ferrets. It is next to impossible to punish the persons guilty of thus violating the law. There are also a great number of ruffed grouse and quail lumping up in the markets and restaurants, and I fear that they did not come from honest powder and shot, but by the pot-hunter's snare.

Several sportsmen residing in this city were on shooting trips to the West this fall, and found game abundant in Ohio, Indiana and Michigan. They relate stories of famous sport among the quail and ducks of our favored sister States, in which a good day's shooting may still be had without walking over a county. Our Western friends of the gun should be wise in time, and if possible take measures to perpetuate the advantages of the gun for enjoyment of shooting. I thought years ago that the plan recently proposed by FOREST AND STREAM, of renting the privilege to shoot on farms, would before long prevail in this country and become necessary, if any game is to be preserved at all. I hope we shall never see the oppressive and undemocratic game laws of England disgracing the statute books of these States, but there is a vast difference between limiting sport to a few, and allowing indiscriminate slaughter of birds in and out of season. We should try and find the golden mean.

What I have written above about the gunning trips reminds me that although most of the visiting sportsmen—not statesmen—have returned home, one distinguished member of the fraternity followed the example of the birds and went south in time to avoid the cold. I speak of Robert Tangueney, the fishing-tackle maker, well known in New York, an odd genius of French descent, born in Ireland and a cosmopolitan

by inclination. He started with two boys for Florida a few weeks ago with the intention of "doing" that State this winter in a canvas boat of his own construction. I heard from him a day or two ago and he was then on the St. John's River with a good prospect ahead. I comment on the good offices of any of your readers who may chance to meet him. He will entertain a sportsman with tales of trout-fishing in the longhills of Ireland, salmon-fishing in Norway or adventures with the alligators and sharks of the South. A deffer than to tie a fly does not exist, and he is a good shot. A catalogue of his outfit would occupy too much of your space, but it included four guns, two or three thousand feet of netting, fish lines by the mile, fish hooks without number, some made of half-inch steel, for alligators and sharks. He expects to make the trip by rail, and collecting bird skins, alligator teeth and other rarities.

The organization and first annual exhibition of the American Society of Taxidermists took place here this week. The exhibition is now in progress and the election of officers was held yesterday in the rooms of the Monroe County Sportsmen's Club. The meeting opened with an address by Frederick S. Webster, of this city, who traced the progress of the art from its earliest history to the present. Prof. W. E. D. Scott, of Princeton, N. J., on behalf of the Judges' Committee, offered the congratulations of the judges on the excellence of the display made at the first exhibition. The Constitution was adopted and the following officers elected for the ensuing year: President, W. E. D. Scott, Princeton, N. J.; Vice-President, F. S. Webster, Rochester; Secretary, W. T. Hornaday, Rochester; Treasurer, F. A. Lucas, Rochester. Standing Committee: Thomas W. Fraine, William G. Smith and J. F. D. Baily, Rochester. The society has six honorary members, one corresponding and thirty-seven active members. The latter are scattered through five States. The catalogue of the exhibition contains a list of 239 entries, representing some thousands of specimens. I must omit a detailed description of the exhibition, to which it would be difficult, if not impossible, to do justice in words. It is in a large room on State street and as its attractions become known the attendance of visitors increases daily. Every zone on the globe was drawn on for contribution to the specimens exhibited, and you may imagine that the display is rare and brilliant. Birds, beasts, reptiles, fish, insects and about everything that can be preserved by the taxidermist's skill is shown. The largest creature in the list is a fine bull bison and the smallest I recall, except the insects, is a tiny humming-bird. Between these extremes the variety is infinite.

The city police court has a case before it of some interest to your readers. A certain man is under arrest and will be tried next week on charge of allowing some valuable dogs, which he was boarding, to starve to death. One dog he had was a black setter named Sport. This dog died, and others he had are reduced to skeletons. Sport was valued at \$80 by his owner, Isaac Weighell, who left the dog with the accused last summer and found out a few days ago that the dog was dead and that others were in danger of death from the same cause. One of these is a bitch—Lulu, blue belton—said to be out of a Gordon setter sent by the Prince of Wales to Henry Milwood, of Chicago. Her hair had nearly all fallen out and the bones were pressing hard to come through the skin, which was with a saffron-colored, scurfy surface. Weighell says the dog was starved to death, and that he had no money to buy dogs have mange. Weighell, the owner, who is the only one acquainted with the diseases of dogs, says it is not mange, but ill-treatment, that afflicts the living dogs and killed the ones that are dead. E. R.

OUR DETROIT LETTER.

I HAVE just come from an interesting interview with a party of deer slayers, and such enthusiastic fellows I never saw before. One of them is at this moment skinning a deer of his own killing, and he swears by the recollections of the last two weeks that he is going to have that skin lined and ornamented and spread in front of his bed for a morning or two.

To save space I will condense my interview and give it you as succinctly as possible in narrative form, simply explaining that I shall employ the language of the captain of the party instead of my own.

"Our party," began my special informant, "consisted of A. J. Rogers, Superintendent of Police of Detroit; Ed. H. Gilman, John E. Long, Frank Edley, of Detroit; Wm. McSweeney, of Fraser, Mich., and James Moore, of Toledo, O. We had been making the rounds of the woods, and had finally perfected the details preliminary to a campaign in the big north woods of Mich., and started out from Detroit, November 25, with dogs, Winchester rifles, wet and dry supplies in abundance, and an unlimited stock of hope, happiness and appetite. We took train at 10:10 p. m. on the Detroit and Bay City Railway, arrived at Bay City in time for an early breakfast and, after a natural cigar, left at 8:30 a. m. on the Mackinac division of the Michigan Central Railroad in the paternal care of conductor James English, one of the most amiable and careful of railroad patriots. Oscego Lake was our immediate objective point. This is about two hundred and fifty miles from Detroit, as I estimate it. We reached there in the evening and stayed overnight at a most comfortable inn where the accommodations were on the most liberal and homelike scale, and where we had a night of delicious and refreshing sleep in needed preparation for the next day's fatigues. We were going fifty-two miles almost due north to the woods to a point which we subsequently christened Rogers Lake in honor of our chief, who proved to be a daily in camp, a splendid cook, a man of inexhaustible good humor and a dead shot, the result of years of experience in the army and on the plains of the Far West. (He is an old Californian overlander.)

"That was one of the toughest journeys I ever had, and our adventures, if you had room for them, would fill the FOREST AND STREAM for a month. Well, we loaded up a team and left at 10. Two of our fellows had sore feet—no kidding me, I assure you. They had no shoes given out, and actually couldn't stand it to walk so the rest of us took turns about in walking and riding all day. We made twenty miles by noon, when we ran plump into E. O. Avery's lumber camp, and the first man I met was J. N. Tiff, a well known New Yorker who spends a good deal of time at Alpena and who was there on his way East. I can't quite describe that meeting, but you bet we made things lively there for a time. Our team had become dead fagged, so what Rogers and Avery do do, but give us their own team and send us rejoicing on our way to his other camp, and northward with a letter of welcome to his Superintendent, Black Jack McDonald, whose cheery voice we heard at exactly 9 o'clock, r. m. Such a supper as he set out for us! And would you believe it, he turned himself out of quarters and insisted on

giving us the whole camp. Such hospitality one don't encounter except among men with the true instincts of the sportsman, even if he does happen to be a lumberman. I would like to linger over our stay there, but the yarn spinning must not stop for such reminiscences now.

Sunday morning November 23, found us again moving. At mid-day we stopped at Potter's camp for dinner, fed the cattle and at a quarter to four once more cracked our whips, and with a lo! for the merry good green wood! a good-by to the Potter campers, a few whoops of satisfaction, away we went bounding along on the roughest road man ever lived to conquer. At Miner's farm, which we reached at 6 o'clock p. m., we were joined by Joe Kurtz, who was henceforth to be our guide and captain. Joe is a character—a regular backwoodsman, lithe, strong, swift, with the organic grace of the catamount, eye of the eagle, nerve of a man and a nature as rugged as the man is picturesque. His cabin is only a few miles from Miner's and we were soon domiciled. The place is of logs, but comfortable, even if it is only fourteen feet square, and boasts besides the bed a table nailed up to the side, and some rather primitive but mighty useful cooking utensils. Including Joe and his partner "Buck" (Albert Rofor) another genuine son of the forest, eight of us bunked in the one room. My chum and I were well fixed with balsam boughs, blankets and deer skins, and I don't want a better bed than we enjoyed all the nights we passed there.

"Daylight found us stirring. Deer signs were plentiful and, marshaled by Joe and Buck, we went to business. Nine days we stayed, and during that time we six killed twenty-six of the prettiest deer I have seen this season. Our chief killed four, Gillman and Mcweeney killed five each, and Long, Moore and Eddy killed the remainder. Four of them were twenty-two years of age and were brought to town, besides one live one which was going to present to the city for the Lake Isle Park. Those nine days were certainly among the most enjoyable I can recollect, and all the party feel in the same way about the trip. I shall have to give Mcweeney the honor of first blood, but after that we divided the honors with fraternal equality. Long was accused of a slight attack of 'buck fever,' but he took the joke in good part and gave us all practical demonstration of his nerve and coolness in the midst of the most exciting sport.

"Fast well, I reckon. Our solids consisted of venison, pork, potatoes with the jackets on and unlimited at that. We broke camp December 8, paid Black's camp a visit on our return and reached Otsego Lake (where we were to take train) in a heavy snow storm, all broke up and ready to tumble into bed at 6 p. m. on the 9th. Horses, men and dogs were well cared for by Mr. Briuk, of the Otsego Lake house. He is a man who knows every inch of that country, and can cheerfully recommend the best sportsmen as one they had better know if they go that way.

"Now we are back in town and I am going to bed just as quick as I can get there."

So spoke the jolly hunter, and if our friends will come this way I have no doubt that they will be even better entertained by the recital at first hands than I was. It is a tale to stir the sportsman's blood, and I only wish that I could have tasted some of the pleasures of that memorable fortnight among the antlered nobility of Michigan's splendid forests.

G. F. G.

THE LACKAWANNA ASSOCIATION.

SCRANTON, Pa., December 11.

THE gentlemen of this city are not devoted to the interests of trade and manufacturing entirely, despite the fact that coal and iron are their staple products, but among them are many who have time and the active cares of business to chase the antlered nobility of the glen or brook the gleaming water of the brook. The time has gone by when one could find good trout fishing within ten minutes' walk of the city's centre, for the polluted water pumped from a hundred sulphurous shafts has poisoned the most of our streams to such an extent that no living creature can abide therein; neither can a deer be started up in the course of an easy walk from town. But an hour's ride will land one in some fishing waters, and a half-day's journey carries the eager hunter into the wild forests of Sullivan or Warren.

The rapid development of this section, with its consequent inroads upon fish and game, threatening their utmost extinction, led to the formation, about a year ago, of the Lackawanna Game and Fish Association, the members of which are pledged to assist in every way in the development of sportsmanlike pursuits. To this end frequent meetings are held at which notes upon cases of timely intercalated decisions, and particular attention is paid by the association to the protection and development of game. To this end carefully compiled abstracts of our game laws have been distributed among the farmers, and many of the best lakes and in the county are being stocked with choice fish under the direction of members of the club. Trout and land-locked salmon have been supplied to all parties asking them for stocking purposes, and some thirty of the lakes in this and adjoining counties have been plentifully sown with wild rice with the intention and hope of inducing the wild duck to make his habitat there.

The association is under the presidency of Dr. I. F. Everhart, a born naturalist, whose knowledge of woodcraft and game lore is inexhaustible, and whose taxidermic collection of native birds and beasts is unquestionably the finest in the State, the Doctor having made the postural peculiarities of his subjects a study.

Last night the association gave its first game dinner, inaugurating therein a custom which is meant to be carried out yearly hereafter, at which almost all its members were present, and which was carried out with consummate skill of arrangement and detail. The large dining-hall of the Wyoming House was the scene of the reunion, and the bill of fare embraced every seasonable dish of game indigenous to this locality as well as a noble contribution from friends at the Far West. The preparation of the various dishes was perfection, and that the eating was not less so, not think me guilty. I know the man that you may regret for yourself upon its comprehensive character, only regretting that the taste and the flavor of the several dishes cannot be transmitted also. One of the curiosities of the evening was the wildrice, which was served boiled dry so that every grain stood out individually plump and firm, and which was served with squirrel and French peas. This rice has a delicious flavor, more pronounced than the cultivated article, and is a peculiar delicacy, and it was particularly declared to be a rare article of food, far exceeding in character such preparations as oatmeal, hominy, cracked wheat and other familiar farinaceous dishes. This wild rice was obtained from Canada.

The dinner was served in courses, and lasted from half-past nine p. m. until after one o'clock. Toasts were proposed and

responded to as follows: "The Lackawanna Game and Fish Association," by Dr. J. F. Everhart, the President; "Quail and Grouse Shooting," by Cornelius Smith, Esq.; "Deer Hunting," by Col. A. B. Blair; "Game and Fish Protection," by Mr. H. E. Hess; and "Fox Hunting," by Mr. Chas. R. Smith. Fun and anecdote enlivened the evening, and the occasion was one replete with pleasure, from which the members separated with renewed encouragement in their work and a determination that next year's dinner should be far surpass this as the present one exceeded anything hitherto attempted here.

An admirable feature in the contribution of this association is that no expense is permitted to be incurred unless there is money in the treasury to pay the same, so that the "cancerous leprosy of debt" can never fasten itself on the society's prosperity. It is doing its work in the right way, and because of your well known approval of all that conduces to the welfare and encouragement of sporting interests I venture to send you this account of the first annual dinner of the Lackawanna Game and Fish Association. H. E. H.

SQUIRREL SHOOTING.

MACON, Mo., Dec. 12.

IN your issue of December 9, "Sancho Panza" has introduced the subject of squirrel shooting, for which I extend my hand. I am sure squirrel shooting is fine sport, that none need be ashamed of, and hope to see the subject kept up in your valuable paper.

I began my long ago with my grandfather's old flint-lock Kentucky rifle, and have enjoyed the sport in all its shades and colors, and have found it to possess many attractions and pleasures not found in other kinds of shooting.

In my youthful days we used rifles altogether, and in those days a man that would shoot a squirrel through the body was looked upon in about the same light that a poacher is now.

In my shooting I have encountered much of the same kind of experience Sancho Panza speaks of. Have often exhausted every means at hand in order to induce his shrewdness to step around on my side of the tree without succeeding. We have only two kinds of squirrels here, the fox and gray. The gray is much more shy than the fox squirrel, and much harder to induce to come around on your side of a tree. When you see a fox squirrel take a tree, if you will remain perfectly still for five or ten minutes you will be very likely to get a good shot. The fox squirrel will creep up the tree, as his curiosity to know what has become of you will induce him to look around on your side. I have often secured a good shot in this way, and often scared them around by throwing a stick into the leaves beyond the tree. This will not always do, but I am satisfied that "Sancho Panza's" plan will almost always work to a charm. Very few men know how to hunt squirrels. Most men are apt to hunt too much, and too much is worse than not doing. To hunt successfully you must hunt very carefully and very slow, remain entirely still at least one half the time. Any one can see much better among the leaves and branches of the trees by standing still. Sit down on a log or stump, every few hundred yards, and remain just fifteen or twenty minutes, and you will often have you patience rewarded by seeing one of the little rodents jump up on the side of a tree, and skip along on a log near by, or, perhaps, see one caper out on some of the lower boughs to bark or chatter.

I agree with "Sancho Panza" that it requires considerable skill to shoot a squirrel running on the ground, or a fallen tree, and particularly on a worm fence. There is no use in trying to follow the motion of the squirrel in a worm fence. Catch sight at a corner he is approaching and fire the instant he arrives. In shooting at them running from one tree to another among the topmost branches, aim to get in your work just as they make their spring from one limb to another, but don't feel disappointed if you miss, for I assure you that you have no dead side story.

It is fine sport to shoot them in the fall, when they begin to cut down hickory nuts. Go out into the hickory timber early in the morning, or late in the afternoon, and stand still for a short time, and if there are any near you the falling particles of hulls striking against the leaves will soon inform you of their whereabouts. It takes a strong shooting gun, and a full choke at that, to bring them down from the tops of some of the trees in this part of the country; they frequently get entirely out of reach of an ordinary muzzle-loader in the hands of the tyro.

As it is in order now, I will relate one of my exploits in squirrel shooting. Last October, myself and Capt. Jno. London (the reason I mention Capt. London is that I may have a witness) went squirrel hunting on the Chautau River. I found four up one tree, and took them down from the top of the tree a few seconds, as they often do. Just as I had slipped in another shell and closed my gun, I saw another rear the top of the tree, which I shot and killed, and just as I fired the second shot squirrel No. 3 started to run, and I gave him the other barrel, and had three falling at one time.

Some writers say squirrels lay up a store of nuts, etc., for winter use, which I think is a mistake. I hope to hear more on this subject.

BORDER BRYAN.

TEXAS CHRISTMAS TURKEYS.

NEW ROCHELLE, N. Y., Dec. 10.

THE editor of the *Henrietta Shield*, Clay County, puts the matter thus: "Thanksgiving turkeys were not numerously circulated in these parts yesterday. The weather has been too cold to go out and shoot them."

From this we see that the wild turkey is, of all others, "the bird," in Texas, looked for to grace the holiday tables. But what say you, "ye daring sportsmen," to this very charitable charge—"too cold to go out and shoot them." I don't think it evident that you would have taken along their frying-pans, but in their joyful mood around their camp-fires, and in their utter forgetfulness of Christmas the turkeys they killed found their way into these pans, and so "evaporated," of course. That's the trouble, no doubt; and very naturally too, for you will know how alluring the odor of turkey cooking around the camp-fire is, especially on a cool, bracing day. This is surpassed only by the taste of the bird.

Speaking of the toad-like merits of the turkey reminds me of the Frenchman's description of it; he was found of a square meal. Said he, "The turkey is one very inconvenient bird; he is a little too much for one person, but not quite enough for two." And this was said of the tame turkey, not of the game wild one. Query: What would he have said of the juicy, fat wild turkey? Just enough for one, of course. The same paper says, "A load of wild turkeys was recent-

ly brought into town and sold at fifty cents apiece. They are reported to be abundant in the West." Only think of buying nice wild turkeys, some weighing fifteen to twenty pounds, no doubt, for fifty cents. This would exactly pay for five boiled eggs in some of our fashionable eating houses I observe, however, that the price of turkeys has risen since I was in that country. I used to buy from the wild Indians large, fat gobblers for twenty-five cents, and the smaller ones for ten and fifteen cents. But this was in 1854-5, when there was not a solitary resident in this northwestern part of Texas.

A cold snap, commonly called "a norther" in Texas, is just the best time possible to hunt them. They then huddle together and are quite confused and easy to kill. They do not see, like Northern wild turkeys, to stand the cold weather with indifference. I now recall a short hunt I made for them during one of these northers. It was from Fort Belknap, lying in the same region of country. In two evenings we shot, mostly by moonlight, six round dozen, when we ceased firing, withdrew and carried off the dead. We had enough for all, and as many as our wagon could accommodate. I made use of my trusty rifle, and by moonlight brought them down at every shot from their high roosting-places among the trees. I placed them directly between me and the moon (two days from the full), aimed a little low in the fork, pulled the trigger, when they came tumbling to earth. This was at the crossing of the Clear Fork of the Brazos River, main road, and not far from where Fort Griffin is now situated. The month, December. I mention all this mainly to stimulate the good sportsmen of Clay County, to good deeds for Christmas and New Year's days. I hope to hear through the *Shield* a most favorable account of them, and that lots of plump gobblers, with all the *et cetera*, have circulated most freely, not only there but everywhere else on the coming holidays. Especially may the editor of the sporting journal, *FOREST AND STREAM*, 39 and 40 Park Row, N. Y. city, be blessed on these days. We know him to be deserving and very modest. H. W. MERRILL.

THE SOUTHAMPTON CLUB.

THE Southampton Sportsmen's Club was organized in 1884, and duly incorporated under the laws of the State of New York. The membership is limited to twenty and comprises some of the leading and most thorough sportsmen in New York and Brooklyn.

The club has leased for a term of years the exclusive right of shooting over a large tract of fine quail and woodcock country, consisting of farms at Southampton on the east end of Long Island, and is pursuing the only true course for the proper protection of game and the preservation from ignorance of the principles of old sportsmanship.

Included in the property of the club are all the necessary paraphernalia to a complete rig for duck shooting on Shinnecock Bay. Also a beautiful fresh water lake about two miles square, which will be thoroughly stocked with black bass this coming spring. A game keeper is employed permanently to watch over the premises, detect and report to the club poachers, snarers and persons shooting out of season, for the purpose of prosecution, and annually several arrests have been made and eminent counsel engaged to punish offenders for violating the game laws.

In winter the birds are thoroughly fed and by this means kept alive through the severe weather; and the good results of this plan have been fully attested by the peaceful and happy whistle of the cock in the spring and the abundance of game in the fall. A bag of from ten to twenty-five head being a good day's sport for a good sportsman.

During the opening week of the present season there was a very fine display of setters in the field belonging to the members; the most noted being the Hon. Townsend Cox's blue Bel on Ned; Edward G. Whitaker's English setter white Mito, an extraordinary quail and woodcock dog; D. T. Kennedy's Irish setter Sankey and Henry M. Leverich's black and white setter Ben. The two latter are magnificent runners and exhibit extraordinary powers of endurance and keenness.

During the winter months fox hunting is a very enjoyable feature, the club owning several fine fox hounds and genuine wild red foxes being plentiful on that part of the island.

It is only through such associations as this that the shooting in the vicinity of New York can be preserved and sportsmanship relieved from the odium attached to it by the persistent massacre and wanton destruction of the poor little domesticated pigeon, and the absurd, useless and oftentimes aimless breaking of glass balls.

The large clubs of New York and vicinity, both for shooting and the protection of game, seem to have entirely lost sight of the real object of their organization and have degenerated into a system of periodical dinners and post prandial bombast, and with many members "going shooting" is synonymous with nocturnal Bacchanalian revelries with whiskey for ammunition and the only game "poker."

If the clubs really interested in pursuing their favorite pastime in a sportsmanlike manner were to emulate the example set them by the Southampton Sportsmen's Club they would find themselves on the true path to honorable, healthful and humane enjoyment.

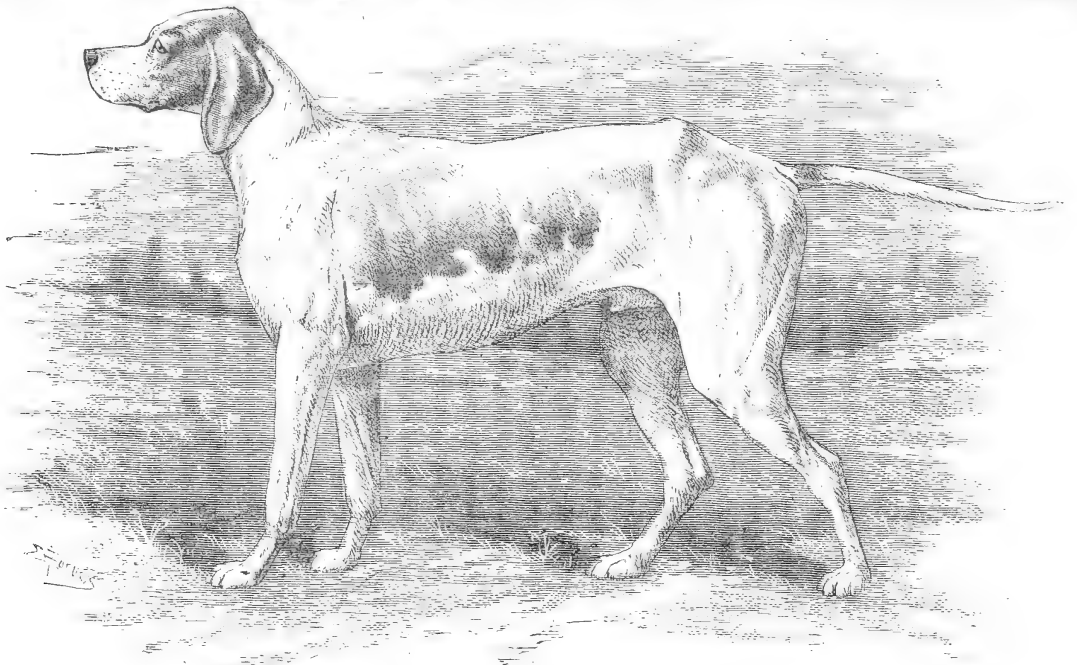
NIMROD.

THE LONG ISLAND ASSOCIATION.

AN adjourned meeting of the Game Law Committee of the Long Island Sportsmen's Association was held at the Fountain Gun Club Rooms, 494 Flatbush avenue, Brooklyn, last Saturday evening, Capt. W. L. B. Steers in the chair. The question on the size of the mesh of nets erected considerable discussion. It was finally decided that whatever size mesh was adopted, the word "square" should be inserted after the word "inches." It was resolved that the committee should have the laws to submit to the Legislature to Albany, as near the assembling of the Legislature possible, for the purpose of recommending to the Speaker of the House a committee on the game laws for Long Island. Mr. Barnett Phillips spoke in regard to the alarming decrease in fish, and cited some statistics that were almost incredible. Also that the Association must work together and hasten slowly in order to secure proper laws to protect fish and game.

The Secretary was instructed to write to Mr. A. E. Godefroy in regard to the trapped quail that he saw on a Long Island railroad train, and ask him to furnish information on the following points: The name of the boy that was selling the quail, the name of the baggage-master, proof that they knew the birds were trapped, and in what county he saw

* Texas papers please copy.



WESTMINSTER KENNEL CLUB'S SENSATION.

The Kennel.

Pittsburgh Dog Show—Pittsburgh, Pa., January 17, 18 and 19, 1881. Entries close January 6. C. B. Elben, Secretary: Charles Lincoln, Superintendent.

SENSATION.

SENSATION is the property of the Westminster Kennel Club of this city, and was bred by Mr. J. D. Humphrey, England. This famous lemon and white pointer is by Mr. R. J. Lloyd Price's Jim, out of Mr. Humphrey's Nell. Jim was by Whitehouse's celebrated Hamlet out of Juno. On September 9th, 1876, Mr. George De F. Grant sailed for Europe, and while in Wales picked Sensation out as the best dog he had ever seen. Sensation was broken when bought, and was bred for a field trial dog. He was whelped May, 1874, and imported on November 10th, 1876. His winnings on the other side were as follows: Shifnal, 1875 first prize; Swansea, 1875, first prize; Carmarthen, 1875, first prize; Oswestry, 1875, second prize; Birmingham, 1875, second prize; Llanelly, 1875, second prize, and at Newport, 1876, second prize. In the United States he won first and special at Baltimore, 1877; first and three specials at St. Louis, 1878; first and two specials at Baltimore, 1878, and first and special at Boston, 1878. Besides these winnings the dog has been exhibited at all of the New York shows, but not entered for competition. As a stud dog there has never been a pointer in the country whose services have been in more frequent demand. The dog is so well known on the bench that it is unnecessary to refer again to his make up. His head, which is grand, is as well known among dog men as Hambletonian's shape is by lovers of the turf. The appearance of Sensation in the field was a surprise to many, and his excellent performance an astonishment to all but a very few. He is a plucky goer, and has a wonderfully good style, backed by a very keen nose. In the trials he was placed after contesting for first with the famous Gladstone.

FIELD TRIAL RULES.

PITTSBURGH, Va., Dec. 13.

Editor Forest and Stream:

I have read the FOREST AND STREAM of late with increasing interest, and noticed its rapid improvement. How often of late, after reading many articles, such as your own on Pittman powder and correspondents on various subjects, have I felt like slapping the authors on the shoulder, and with hearty approval, in the language of an old friend, saying, "That's right, my boy, now you are shouting." But "Couples" articles of late on the crudities of the N. A. K. C. Field Trial rules are what have called me out. Now, "Couples" is moving in the right direction, and I doubt not but what he is seconded by many sportsmen all over the country. Though in his second letter he seems to manifest a little impatience that no one has rushed in to assist him, yet these letters will be productive of good fruit. And let me say in the language of the good old Scriptural injunction, "Be not weary in well doing."

I do not propose at this time to undertake a revision of these rules, but simply wish to ventilate some thoughts in support of "Couples," and regarding the dissatisfaction at the Pennsylvania State Field Trials, which, in his article, he says came near breaking up in a row. I think I am safe in

saying there never was a period in the history of this country when sportsmen were so thoroughly interested in field trials than now. Last spring the spirit seized the sportsmen of the Keystone State, and the Pennsylvania State Field Trials Association and trials at Lancaster last October were the outgrowth. We adopted with little change the N. A. Field trial rules, and we discovered at the trials that the rules were not perfect by any means, and that when read it cost no little effort to understand them fully. As an illustration of this Lancaster on the evening of that rainy day when King Dash thought victorious in the field had been laid *hors d' combat* by the judges. In a private room I observed the Secretary, 1st Vice-President and Treasurer of the Association engaged in a very animated controversy, and on drawing near found that the rules were the subject under discussion. The Vice-President and Treasurer were insisting that at the conclusion of the first heat (not yet finished) the 1st, 2d and 3d prizes should be awarded, and the free-for-all ended; the Secretary contended they were wrong, and on referring to the rules, and reading and re-reading the disputants only insisted more firmly on the correctness of their positions. Not until the Secretary called in overwhelming evidence would the Vice-President and Treasurer be convinced that they were wrong. So much for the application of the rules in this particular on the part of intelligent gentlemen.

Again, two circumstances at Lancaster brought to light very serious defects in the rules. For example: After the heat between Siler's Dash and King Dash had been awarded Siler, he left, taking his dog with him, thus shutting King Dash out of the race entirely under the rules, though had he remained and gone to the front winning first money King Dash would have had a chance for second or third place.

At the conclusion of the heat between May Laverack and Brown's Dash, in favor of the former, Mr. Spoellenberg announced that he withdrew May, boldly avowing his intention by so doing to shut Dash out. The judges decided King Dash's chances should not be prejudiced by Mr. Siler's action (which the rules gave them no authority to do), and also refused to allow May to be withdrawn.

There is no doubt about the rules being crude and indefinite, but I cannot agree with "Couples" that the bad feeling at Lancaster grew out of this fact, but rather out of a misapplication or wanton disregard of the rules, and here are the facts to prove what I say:

King Dash was badly off in nose, as all knew who saw him, but notwithstanding this he demonstrated he had some nose, while Siler's Dash showed no nose. He ranged wide, quartered his ground well, showed good style and speed, was perfectly obedient, found all the birds, secured one magnificent point and retrieved the bird when killed.

Siler's Dash did not find a bird or secure a single point, except a false point, upon which he dropped, when King Dash was penalized for not backing; showed no nose or speed, did not range or quarter his ground to compare with King Dash, and yet we had the strange anomaly of a dog which had absolutely done nothing awarded the heat over a dog that did all the work. The error of the judges in penalizing King Dash for not backing here was most manifest to all acquainted with the rules, for he was expected to back unless the dogs distinctly say, "No dog shall be expected to back unless the dog pointing stands and is motionless. A dog shall not be said to refuse to back unless he sees the dog pointing," both of which provisions were disregarded by the judges. But their blundering did not cease here. After the announcement of the heat in favor of Siler's Dash it was soon given out that there was a misunderstanding between the judges and a mistake as to the heat being decided, and that the dogs were only ordered up to be put down again. The next morning were only returned to the field and it was understood, by authority of the judges too, that the first thing to be settled was the heat between these dogs.

The rain prevented any work during the day and we returned to Lancaster. That evening about four or five o'clock the judges met in a private room of the hotel and again

awarded the heat to Siler's Dash. Now, the strangest part of this transaction is this: as it was a question of "pointing" and "retrieving" to be settled, that the judges should order up the dogs for a fresh brace right in the midst of scattered birds.

Then again, it was asserted on good authority that the judges admitted that the figures of merit actually given by them in the field showed King Dash had (9) nine points the advantage. O, ye gods! what strange work we have out of judges at field trials.

What we need is a set of rules as near perfect as possible, that will not admit of jockeying or tricks, and judges that, regardless of person or blood, will dare to do right and give honest judgment according to the rules. I can safely say there never will be another trial run in this State under the present rules. In this connection I should like to speak of some of the irregularities of the N. A. K. C. trials, and especially the bad taste in Dr. Rowe in trying to run Count Noble to the front when he was fairly beaten, in the judgment of parties present, by two entries in the Derby, but I will leave this until my next.

The chief interest now among sportsmen of this city is the coming dog show in January. We learn some of the finest dogs in the country will be here, and it bids fair to be the most interesting show ever held in this city. F.H.R.

DEFECTIVE RULES.—December 17, 1880.—Editor Forest and Stream.—In the account of the Eastern Field Trials given by your Western contemporary, he speaks of Isabella having won at Memphis in 1876 by an imperfection of the rules. I would ask any practical sportsman (not the gilt-edge modern Solomon whose cartridge belt weighs more in the morning than his game bag at night) whether rules that will admit of a part of a third prize going to a bitch at the N. A. K. C. field trials for pointers and setters which made nothing but flushes, and later at the Eastern field trials a first prize going to a dog which made four straight flushes before a captive bird was turned down for him to point, is more perfect than those under which Isabella made five straight points and won—"Consistency, thou truly art a jewel." M.

EASTERN FIELD TRIALS CLUB.

A MEETING of the Eastern Field Trials Club was held at 24 Park Place, Thursday afternoon December 16. The following gentlemen were present: Mr. Chas. H. Raymond, Mr. G. W. Bassford, Mr. H. W. Livingston, Mr. W. A. Coster, Mr. Max Wenzel, Mr. E. A. Herzberg, Mr. F. A. Ryer, Mr. J. Pentz, Dr. L. C. Monroe, Dr. Holmes, Dr. H. E. J. Allen, Mr. J. Von Lengerke, Mr. H. E. Hamilton, Mr. J. O. Donner, Mr. Charles DeRonge and Captain Tuttle; Vice-President F. N. Hall in the chair. The committee on the Tilston fund reported the subscription closed and ready to be handed to Mrs. Tilston.

The following gentlemen were unanimously elected members of the club: Mr. J. Stewart Slosson, Mr. G. DeForest Grant, Mr. Robert C. Cornell, Mr. H. S. Bloodgood, Mr. Newton Earle, Mr. Benjamin M. Earley, Mr. James Beuclard, Dr. S. Fleet Speir and Mr. Chas. Fiske. The President, Dr. A. Ten, having arrived, now took the chair. The following were elected honorary members. Dr. J. Rawlings Young, Col. Gordon, Mr. S. O. Bruce and Mr. George Bird Grinnell. The secretary read a protest from Mr. G. W. Bassford protesting against the re-opening of the club stakes. This protest excited a decidedly warm discussion, and was finally decided by declaring the protest void, and returning the forfeit money to those who have paid it. It was decided to call a meeting of all the members of the club for the purpose of altering the by-laws in regard to changing the number necessary to compose a quorum of the Executive Committee from nine to five. The club resolved that the thanks of the club should be officially sent to the gentlemen who had contributed prizes. They also resolved that the prize for the Brace Stakes should be raffled off, for the benefit of the club, and

Messrs. F. R. Hyer, J. Pentz and W. A. Coster were appointed a committee to arrange the rally. The nominations of officers for the election in January was next in order, and a number of candidates were nominated for each office. The meeting then adjourned.

PITTSBURGH DOG SHOW.

THIS show will take place on January 17, 18 and 19. The entries will close on January 6. Major J. M. Taylor, of Lexington, Ky., as we have already stated, will be the judge. The St. Charles Hotel has been selected as the headquarters for the committee and sportsmen, and under the supervision of Mr. Charles Lincoln, the show promises to be a grand success.

The prizes are for champion English setter dogs, \$20; bitch \$20. Imported English setter dogs, \$20 and \$10; bitch the same. Native English setter dog, \$20 and \$10; bitch the same. English setter dog puppies under 12 months, \$10; bitch the same. Champion Irish setter dogs, \$20; bitch the same. Irish setter dogs, \$20 and \$10; bitch the same. Dog puppies, \$10; bitch the same. Champion pointer dogs over 55 lbs., \$20; bitch over 50 lbs., \$20; dogs under 55 lbs., \$20; bitch under 50 lbs., \$20. Pointer dogs over 55 lbs., \$20 and \$10; bitch over 50 lbs., \$20 and \$10; dogs under 55 lbs., \$20 and \$10; bitch under 50 lbs., \$20 and \$10; dog puppies under 12 months, \$10; bitch the same. Irish water spaniels, \$10 and \$5. Cocker spaniels, \$10 and \$5. Field spaniels, other than cockers, \$10 and \$5. Fox hounds, \$10 and \$5. Beagles, \$10 and \$5; puppy under 12 months, dog or bitch, \$10. Dachshunds, \$10 and \$5. Fox terrier dogs, \$10 and \$5; bitch, \$10 and \$5; puppies, \$10. Greyhounds, \$10. Scotch deer hounds, \$10. Mastiffs, St. Bernards, Newfoundlanders, Siberian or Uln, rough-coated shepherds, smooth-coated shepherds, bull dogs, bull terriers, sky terriers, pug, Scotch terriers, black and tans, Yorkshire terriers, King Charles or Blenheim spaniels, Italian greyhounds and miscellaneous classes, \$10 to first and \$5 to second in each class.

This special prize list will be published next week. Address all communications to Chas. Lincoln, Lock-box 303, Pittsburg, Pa.

PREVENTING DISTEMPER.

Editor Forest and Stream:

In one of my late letters to Forest and Stream I wrote of M. Pasteur (of the French Veterinary College) discovery of a means of vaccinating chicken cholera in connection with my article referring to the modifying and preventing of distemper in dogs by the same or a similar method. It may be of interest to your readers, certainly to the scientific ones, to learn of M. Pasteur's proceeding with the feathered race, as showing how feasible it may be in the case of the canine malady.

The gentleman in question has finally disclosed his famous result, so long awaited, and we copy from the *Cincinnati Enquirer* the following: "We have before us the text of the publication presented simultaneously to the Academy of Science and the Academy of Medicine. This revelation consists in the attenuation of the virus by simple contact with the atmosphere. In effect it is the simple change of the mode of culture of the parasite, whereby the stages of its development are elongated. In this way the virulence of the virus is progressively diminished until, as the author says, 'we obtain a true vaccine virus which, without producing a disease, produces a benign form of the disease, and protects against a mortal malady.' The author declares further: 'It is not to be believed that these attenuations of the results occur with fixedness and mathematical regularity. In some experiments the virus consists to exhibit considerable virulence even after the lapse of five or six months. The cause of this difference, however, becomes apparent on examination. Very often a high degree of virulence ceases suddenly with the death of these microscopic parasites. The widest generalization should be made at once, the circumstance with the lapse of sufficient time, is this necessity of 'temperization,' which M. Pasteur invokes in passing, as the true cause of his silence to the present time.

"The attenuation of the virus is the capital fact. But what is the real cause of the diminution of the virulence?

"The cultivation of the parasite requires as a necessity an absence of air. This parasite is therefore one of those which M. Pasteur has already characterized as *anaerobic*. It can only develop in the presence of the air. Is it then the oxygen of the air which reduces the intensity of its virulence? Does the parasite undergo such attenuation in the presence of oxygen as to suffer modification in its effects?

"This hypothesis was easily verified by experimentation. For it is true that in the experiments conducted by Pasteur, with all his characteristic precision and delicacy, the virus kept in hermetically sealed tubes lost none of its poisoning power, while that exposed to the air gradually lost it altogether. The problem we study thus resolves itself, said M. Pasteur. 'It is the oxygen of the air which enfeebls and destroys the virus.'

"And further he adds:

"We have here probably more than one isolated fact. We have come into possession of a principle. We may hope that the inherent action of oxygen, a natural force present everywhere, may show the same efficiency with regard to the virus of other diseases. The widest generalization should be made at once of this method of enfeebling the virulence. It details a virtue from the cosmic order of things, so to speak. May we not, indeed, attribute to this fact the limitation of epidemics in our times and in the past?

"This modification induced in virus by the action of the atmosphere has been long known and appreciated. We have, for so long a time as we have had it, protected vaccine virus from the air in every way. Exposure to the air destroys it. We keep from the air by wrapping in linen foil, we seal it hermetically in glass tubes by the aid of the flame of a lamp.

In the first article we read referring to M. Pasteur's discovery it likewise stated that vaccination was resorted to in France for distemper in dogs, but particulars were not given. We believe, however, that before long it will be, if it is not already, as efficacious as the vaccination of the human patient for smallpox; but we are not so sure that vaccine matter is the true virus. We witnessed its trial in our list, but is not the true virus in distemper embody a parasite? Can does not the virus of distemper infer a parasite? Let us microscopically examine, and if it is found to be so we have the starting point.

Hoxo.

WHAT IS A COCKER?

ANS. AXBOR, Dec. 12.

Editor Forest and Stream:

I have canvassed the various views presented in late issues of your valuable and "high-toned" paper touching the standard of the modern cocker, and while I appreciate the one great object that seems to animate all these writings, I see in some of them a decided leaning rather to their own strain of dogs than to the fixing of a universal standard that shall govern all classes. I know it will be found a difficult, possibly a thankless, task to adjust the various opinions as to the weight, size and the many other points that are to make up correct judgment in preparing this standard. Therefore men of mature judgment, men who have spent many years of their lives in studying the nature, habits and physical proportions of this bright, beautiful dog, men who can see by that knowledge, gained by long and familiar experience with the cocker, what is required to form this standard in order to bring him up to the perfection demanded, should be put on this committee. The more I hear from those interested in this subject, both through your paper and from private correspondence, the more I am convinced that we will have either an excellent and judicious criterion from which to judge the modern cocker, or we shall have an abortive method which will be erroneous, impracticable and unsatisfactory to all save those, perhaps, who are especially and particularly interested. Now let me say here that I ask no preference in this matter, nor will I have anything more to do with it than to open the way to see that the right men are placed on this committee. I have no axe to grind, and I hope what I may say will be construed as meaning only a deep and abiding interest in the cocker; to lift him out of the slough of uncertainty and doubt into an honorable and creditable position where he shall stand among dogs the peer of the best and inferior to none. That he possesses the highest and best traits of canine quality, both for the field and the house, there is no one who knows this intelligent and beautiful dog will deny, and they who know him best through long years of familiarity and educational receptivity will be the proper ones to stand in judgment to fix his standard. I feel that great credit is due to "Leam" for bringing this matter before the public, and the friends of the cocker, but I cannot agree with him when he puts into nomination as the standard-bearer of this important principle one so young and of so little real knowledge of the cocker, when there are so many prominent men and excellent judges whose names have never been mentioned, nay, have been entirely ignored. I am not opposed to Mr. Macdougall personally, but only as a representative of a principle which many others understand better than he. I think I know the tone and temper of the best cocker breeders in this country, with whom I have had some correspondence on this very question of a standard. I know that if this suggestion of "Leam's" nomination is insisted upon, the whole affair will terminate in a grand fizzle, and we will be further from the end than before. I think you, Mr. Editor, as the representative of the oldest sporting paper now published, should take the initiative, and either adopt my views, which are broad and liberal, or suggest some other which will appear only a good sense judgment of those who have long been interested in the breeding and culture of the cocker. If as some others claim that the cocker is "a mongrel" or a "made breed," then certainly it is a difficult and important task to place him just where he belongs, which will require all the observation, tact and judgment possessed by those whom long years have made competent to undertake the task. Now, Mr. Editor, I hope we shall hear from you, and that you will take such interest in the preparation of a standard for the cocker that has heretofore lacked you, and that you will make it the most important of the cocker will cut no unimportant figure in bench shows hereafter if justice and right is done him, but if these are made subservient to private intrigue or individual advancement, it is far better to let the matter rest where it is than to engender animosity and create a fictitious standard that will degrade this bright and beautiful dog to the vilest

"Mongrel cur of small degree."

We want no "club" such as has been talked about; we want no "prize of \$50"; we want no "bench show" judgment as at present recognized; in fact, we want nothing to do with "fixing up a cocker" that comes nearest to our present standard, until there is a just and sound standard to judge him by. Who that has read about the judgment of the cocker in our "bench shows" already had, who that has seen the impotent and lame decisions that have caused the blush of shame to mantle the cheek of him who knows the cocker, will acquiesce in these recommendations, so devoid of good judgment, so recant to the knowledge of what truly belongs to this grand little dog. While we have such breeders and lovers of the cockers as McKen, Whitman, Cummings, Picher, Allen, Hess and others, who strive to individualize, I trust his good qualities will be appreciated and the genius of his dogship will be kept spotless and untarnished from the machinations of schemers and selfish propagandists. Let us have men, not boys, to fix the status of the modern cocker; then let us all do whatever lies in our power to cultivate and bring these field and house pets up to a commendable standard. Let us all, who are true friends of the cocker, work right up to the standard that shall embrace the good of the breed, its future usefulness, strength and beauty, place him where he belongs in the strain that shall elevate him to a higher destiny and prove him not to be the least valuable acquisition to the true sportsman. I will assist with money and influence to erect such a standard if you will give the cause publicity and help us on to the acquisition of a better status than has heretofore governed the cocker. I believe the largest breeders, from obvious causes, are, as a rule, most worthy to be appointed on this committee. Now is the accepted time, and let all true friends of the cocker strike while the iron is hot and can be molded into the perfect and just instrument for the preparation of a cocker standard.

SENEX.

THE COCKER CLUB.—1182 Chestnut Street, Elizabeth, N. J., December 14.—DEAR SIR: As you have doubtless seen in the columns of FOREST AND STREAM the proposal to establish a club in the interest of cocker breeders and exhibitors, and the request that I should act as Secretary *pro tem.*, to which I have acceded, I take pleasure in laying before you the general outline of what is proposed to be done. You will readily understand that these ideas are by no means fixed, and it is the province of gentlemen who may join the club to make any proposition they may desire to have placed before the associate members. I send you the views which have been presented to me and have been talked over by myself and friends in this neighborhood, and these most applicable to

attain the desired end. First I will state the objects of the club, which are as follows:

The framing of a standard for the judging of cockers and spaniels.

The offering of extra premiums at bench shows at which suitable classes are given, and where the show authorities will select competent judges from a list compiled by the club.

In England several clubs exist, such as the Mastiff, Bulldog, Fox Terrier, Irish Terrier, and Dandie Dinmont Terrier, and the good they have done in advancing the breeds to which they are devoted is incalculable. Such being the case, we can hardly do better than accept them as a guide for us in forming our club. A gentleman of this city, who was one of the originators of the Irish Terrier Club, has given me the following information as to how that was formed and what the club did:

A circular letter was sent to every person known to be interested in the breed, and from the list of those who expressed a willingness to accept a dozen was struck off as a committee of management, and sent around for the vote of the members. My informant says that such a large committee was found to work slowly and much delay business, and that one of seven would expedite matters materially. The whole management of the club and the election of new members falls to the lot of this committee. Having thus formed their club, the Irish Terrier committee men waited upon the English Kennel Club committee, and expressed their willingness to give additional prize money, together with medals, provided the Kennel Club would select from a list of half a dozen names one gentleman to act as special judge of the breed. This the Kennel Club readily undertook to do, as thereby they were assured of a better premium list, and also of the support of the prominent breeders as exhibitors. The same course has been adopted ever since, and by the instrumentality of the Irish Terrier Club committee classes are given at many shows where none were provided before, and the breed has now become one of the most popular in the estimation of those who like a game terrier. An annual meeting of members is held once a year, when the new committee is elected to act for the year then ensuing.

It is just such a club as that which we require here to do away with the present very much diversified types of field spaniels and cockers as seen at our bench shows, and get some harmony in our exhibits by knowing what we must all recognize as the standard. It is not my province to advance any views as to the standard. That remains for the committee to do. All I am desirous of doing is the procuring of your name to put on the list of members. The annual dues will be either \$2 or \$3, as determined by the committee, and as an entrance fee will likely be required from those who join after the organization of the club, it will be an advantage for you to give me a favorable answer at your early convenience, besides that I want to get things in running order as soon as possible. Yours respectfully,

Geo. D. MACDOUGALL.

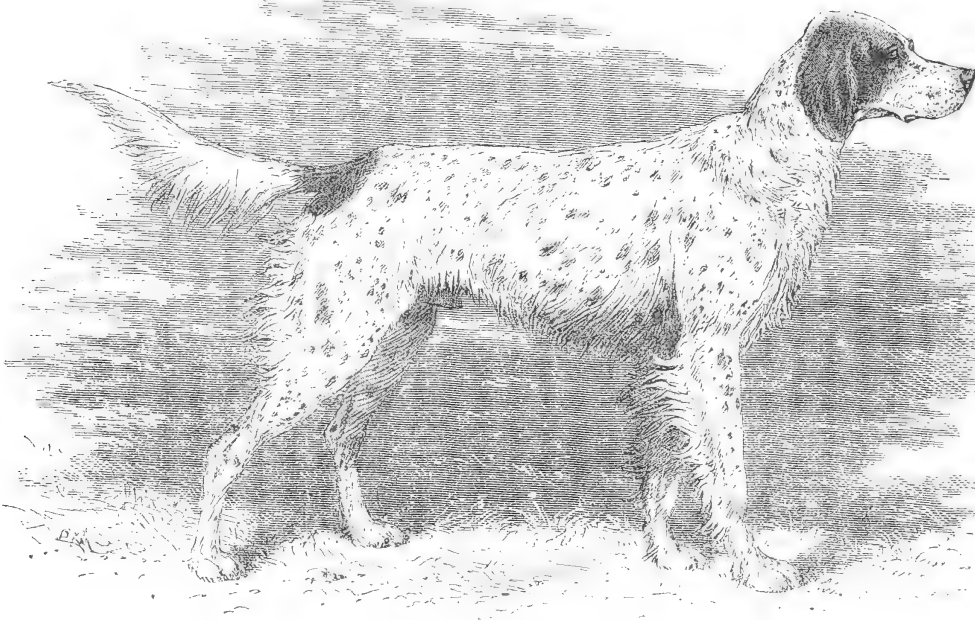
THE COCKER CLUB.—We should be pleased to comply with the suggestion of "Senex" and those who have seconded his request that the FOREST AND STREAM should send out circulars to the cocker breeders to that request not come to us after we had already received and published Mr. Macdougall's assent to "Leam's" nomination of that gentleman as Secretary *pro tem.* To so interfere would be unbecomingly, and indeed we believe that the opposition to "Leam's" nomination has arisen from a misapprehension of just what our correspondent really meant. To put cocker breeders into communication with each other it is necessary that some one individual shall do the clerical work. Mr. Macdougall has expressed his willingness to perform that labor, and offers to act as a temporary secretary until those who are interested shall by their ballots appoint the secretary and committee of the proposed club. The cocker breeders who join the club have it entirely within their power to elect whom they please. The FOREST AND STREAM hopes to see a large enrollment in the proposed club and a competent secretary put into office by the ballots of the members. The whole direction of the club must be in the control of a majority of its members. Let that majority decide by their votes.

FRENCH TRUFFLE HUNTING.—The following extracts, taken from a letter recently printed in the *Times*, are of interest to dog lovers. The gathering of truffles gives bread to a considerable portion of the peasantry in the neighborhood of Bordeaux, and the account of how the dainty is found is an attractive one. The extract is as follows:

The ground is red, a trifle stony, and not over productive. The good peasant has to toil and mull, and then gets but a poor return. He carefully selects the richest spots, those that are warmed by the sun, and then he plants his truffle. It is used to be a notable vine country, and people made a good living with their vine crops; but alas! the terrible phylloxera came and destroyed the grape, and things were going, at least with those who owned vineyards, from bad to worse. It became then a necessity that many of the peasants who worked in the vineyards should find some other pursuit. But necessity is the mother of invention, and the peasants, who had long known that truffles existed in their grounds, now set about looking for them.

A man alone cannot always find a truffle. In this country the assistance of that animal, sometimes associated with good St. Anthony, is dispensed with. Perigord truffle-hunters still worship the pig as the great discoverer of the cryptogram. The pig has a rare nose, but he is a glutton. Think only of the many lovely truffles these brutal and gluttonous pigs have surreptitiously devoured! There has been heard a cry from the grant of satisfaction, and a glorious truffle, which had it been rescued from the animal's jaws, would have graced the windows of the great Chervet in the Palais Royal and attracted all Paris, has gone for ever, to simply please the indiscriminating appetite of a hog. Our peasant here employs a dog, and the instinct of the animal and the intelligence of the man are combined.

The dog himself is no special breed. We call him a *griffon*. I do not think he is of pure race. You would pass him by without a moment at your side. I know in New York you have gone crazy about dogs, and I know you have just said to put your \$1,000 setters or pointers at truffle-hunting, but be assured that, although familiar with dog and gun, I have a profound admiration for the great skill this poor



P. H. BRYSON'S GLADSTONE

little French griffon shows. I would put his fine nose and instincts on a par with your best blooded stock. A griffon, then, has a delicate sense of smell, and all that has to be done is to educate him. Catch him spoiling a truffle! He would no more do that than would a retriever chew up a woodcock. In order to educate the dog he is scantily fed, and only given bits of bread or pieces of meat which have been rubbed with truffles. One might say that though the dog's face was scant it was well flavored, and quality took the place of quantity.

In hunting for truffles with a dog, the animal quarters, leaving not a foot of ground uncovered. He comes to a full stop, and points whenever he noses a truffle. He not only points, but sets to work to find the truffle. He whines and commences to scratch, and if the truffle is not too deeply imbedded he will drag it out. Whenever he flutters out, or has indicated the place where a truffle is discovered, he is rewarded. Besides being called "good dog," he is given a piece of cheese or a fragment of cake.

GLADSTONE

CHAMPION GLADSTONE is owned by Mr. P. H. Bryson, of Memphis, Tenn. He was bred by Mr. L. H. Smith, of Strathroy, Canada, and was whelped July 23, 1876. Gladstone is by Llewellyn's Dan out of Higgins' Petrel; he is a blue Belton and weighs about fifty-five pounds. He is powerful in the loin, fore-arm and hind quarter, with plenty of chest and the very best shoulders, and the most perfect feet. He won the Puppy stakes at the Tennessee Trials held at Nashville in 1877, by a score of 64; out of a possible 66, the highest score made by any single dog in the United States. He won third with dog Whip in the Brace stakes at the same meeting, also second with the half brother Lincoln at Nashville, in 1878, in the Brace stakes. It is claimed he is the fastest all-day dog in America. In the race against Joe, Jr., at Florence, Ala., December, 1879, owing to a broken tail, he could not be hunted for two months before he ran. His speed and bottom were so apparent the judge for Joe, Jr., stated after the race that Gladstone was a third faster than Joe, Jr. One thousand dollars to five hundred was offered at the end of the second day that Gladstone could beat Joe the third day, but this offer was declined. He ran through this race with his broken tail galled in muslin. He was entered in the Free-For-All at Vincennes, in November last, and sold in the pools almost equal to the balance of the field, which was composed of some of the best dogs in America. A snow-storm prevented the race.

He won first in the All-aged stakes at Robin's Island, on the fourth of this month, in a class of twenty-seven dogs many of whom were the finest in the East. He has never been beaten on the bench, and numbers the following as his winnings: Champion First in Open Class, Special for best English setter, and Special for best setter of any strain, St. Louis, 1879. Champion and Special for best setter of any strain, Boston, 1878; Champion and Special for best imported setter of any strain, and Special for best setter imported or native, Baltimore, 1878. Mr. Bryson has perhaps had the highest offers for Gladstone ever made for any setter in the United States, but he refuses to sell him at any price.

IRISH WATER SPANIEL KENNEL.—Messrs. Whitman and Oloot, Chicago, Ill., have named their kennel of Irish water spaniels, Excelsior Irish Water Spaniel Kennel. This kennel, comprised of Champion Barney, said by J. S. Skidmore to be the best dog of the breed ever sent to America; the

dog Mike, also imported from Skidmore's kennel, and winner of several prizes on the Bench in this country, together with the bitch Bridget, imported from Richard White, Dublin, Ireland; Lady and Queen of the River, descendants from the noted Sinbad, make a kennel equal if not superior to any in America. It is believed to be the only one having two first class stock dogs imported from the best kennel in England.

KENNEL MANAGEMENT.

22 **HAMMOCK LOSS.**—My bitch got out while in heat and was lined by a mongrel. She now has puppies three days old. What can I do to get her in hunting shape? Ans. Kill the puppies and dry up the bitch.

23 **G. H. B., Nashua, N. H.**—What shall I do for my pointer puppy eight months old? About three months ago he had two fits and I thought he had worms and gave him sarsaparilla and followed it up with castor oil. He passed blood. To-day he had a fit and ran around the room and snipped and bit for about two minutes and then came to himself again. Ans. The puppy needs plenty of exercise which will probably put him all right.

24 **T. A. G., Esopus, Ulster Co., N. Y.**—The best book on dog training is by Col. Hutchinson. English edition \$3.75, or same combined with treatment of dog diseases by Dinks and Mayhew, American edition, \$3. We can furnish either.

25 **J. P. S., Leavenworth, Kansas.**—1. Can you tell me some safe cure for distemper? I have used various remedies, but have found that they often left the dog in bad shape. 2. I have a dog that is just recovering from a very severe attack of the mange. I used Glover's mange cure on him after trying almost everything else, and now he seems in perfect health; no fever, appetite good, but his hair does not seem to start. He has been apparently perfectly well for over three weeks now, but the hair obstinately refuses to come out and he is still as bald as a billiard ball. 3. Please give me the pedigree of Dr. Aten's Glen. Ans. 1. There is no specific for the cure of distemper; each case requires special treatment. 2. Try crude petroleum, rubbing a little in at a time. A friend of ours recently was very successful in its use. Of course, if the roots of the hairs are destroyed nothing will do any good. 3. Dr. Aten's Glen is out of Mullin's Belle by Colburn's Dash. Dash by Putnam's Dan out of Valentine's Fannie. Dan by Paul Mead's Dash out of Putnam's Nell. Fannie out of Talcott's Nell by his Sport. Nell by W. Watson's black and tan dog out of Munkittrick. Mullin's Belle by Polhemus' imported Duke out of Jane. Jane by Robinson's Jack out of Thompson's Belle. Jack by Putnam's Dan out of Palmer's imported Belle. Thompson's Belle by Rodman's Dash out of Fannie. Rodman's Dash by Paul Mead's Dash out of Palmer's Belle.

26 **H. W. H., Lowell, Mass.**—I have a hound twelve months old whose eyes are small. Five months ago a cat scratched one eye; since then it has run a great deal. Both eyes have been quite weak. The hound then became unwell and at times refused to eat. The dog has been fed on fresh meat. What shall I do for him? Ans. Feed no meat for a month, and wash the eyes with tepid water twice a day.

27 **F. M. P., Madison, N. J.**—What can I do for my coon dog? I have owned him four years. A year ago he commenced coughing very badly and I supposed he had caught cold, but he has kept that cough now for a year. He at times tries to choke something up, but he does not succeed. A gentleman recently told me that he has seen coon dogs in the South troubled with exactly the same thing, and that the cough is caused by hair getting in the wind pipe. Ans. The dog should be carefully examined by some competent surgeon to ascertain if there is a foreign body that can be removed. See Dr. Dancer, Central Hotel, Orange, N. J., he will make examination.

KENNEL NOTES.

NAMES CLAIMED.

Rex—Mr. John W. Woodruff, of Chicago, Ill., claims the name of Rex for Irish setter puppy out of Dell by Elohe II, recently purchased from Dr. J. J. Jennelle, Du Quoin, Ill.

Rap—Mr. Edmund Orgill, of Brooklyn, N. Y., claims the name of Rap for pointer dog puppy out of Glymont (Flake-Lily), by Rocket (Claude-Baum).

Rival—Mr. Edmund Orgill claims the name of Rival for pointer bitch puppy out of Glymont by Rocket.

Rowett—Mr. Edmund Orgill claims the name of Rowett for pointer dog puppy out of Ruby (Flake-Lily), by Honie (Sensation-Rose).

Rile—Mr. Edmund Orgill claims the name of Rile for pointer bitch puppy out of Ruby by Rome.

Melody—Mr. Edmund Orgill claims the name of Melody for beagle bitch puppy presented to him by Gen. Rowett, Carlisle, Ill.

Tuck—Mr. Edmund Orgill claims the name of Tuck for fox terrier dog puppy by Nip out of Wasp.

Bea—Mr. Edmund Orgill claims the name of Bea for fox terrier bitch puppy by Nip out of Wasp.

Grip—Mr. Edmund Orgill claims the name of Grip for fox terrier dog puppy by Nip out of Crib.

Klea—Mr. Hugh L. Willoughby, of Saratoga Springs, N. Y., claims the name of Klea for his black and white markings cocker spaniel bitch puppy, whelped Nov. 18, 1880, out of Dolly by Wildair.

Tear—Mr. Byron B. Fowler, Glenn's Falls, N. Y., claims the name of Tear for his thoroughbred St. Bernard puppy, whelped June 10, 1889, out of Mr. Alfred Brumet's Gretchen by same owner's Don.

Palsey—Mr. M. H. Clark, Clarksville, Tenn., claims the name of Palsey for Irish water spaniel puppy out of Lady, recently purchased from Messrs. Whitman and Oloot, Chicago, Ill.

Cockrocks—Gypsy—In our issue of December 2, Mr. S. G. Bevington's name was published. Mr. S. G. Bering, Jr., we wish to make correction, and state that Mr. Bevington claims the name of Gypsy for his bitch puppy out of Tear by Heck.

SALES.

Elohe II, Dolly Whelp—Dr. J. J. Jennelle, of Du Quoin, Ill., has sold to Mr. John W. Woodruff, Chicago, Ill., a red Irish setter dog pup by Elohe II out of Dell.

Irish Ranger-Irish Countess Whelp—Dr. J. J. Jennelle, of Du Quoin, Ill., has sold to Mr. L. F. Kelly, Princeton, Kan., a red Irish setter bitch pup by Irish Ranger out of Irish Countess.

Judy and Sandy—Mr. M. H. Clark, of Clarksville, Tenn., has purchased the Irish water spaniels Judy and Sandy from Mr. W. H. Holabird, Valparaiso, Ind.

Sally—Mr. F. F. Pitcher, Riverside Cocker Spaniel Kennel, Claremont, N. H., has disposed of the cocker spaniel bitch Sally (Snip-Fairy) to Mr. G. Wilson. Sally was bred by Mr. L. J. Beaton.

Flirt—Mr. F. F. Pitcher, Riverside Cocker Spaniel Kennel, Claremont, N. H., has sold to Mr. Wm. Lee, the cocker spaniel bitch Flirt out of imported Juliette by imported Snip, whelped May 25, 1877.

Bob-Flirt Whelp—Mr. F. F. Pitcher, Riverside Cocker Spaniel Kennel, Claremont, N. H., has sold to Mr. S. Porter a dog puppy out of Flirt by Bob.

Dan—Mr. C. Du Tour, of Cincinnati, Ohio, has purchased from Mr. H. B. VanderSmith the red Irish dog puppy Dan, out of Baushe by York.

Countess Bear—The Montview Kennel, Columbia, Tenn., has sold to Mr. B. H. Purcell Llewellyn, South Ormely Hall, Lincolnshire, England, Countess Bear (Dan-Countess).

Mike—Mr. W. B. Wells, Jr., Chatham, Ont., has sold Champion Irish water spaniel Mike to Mr. J. H. Whitman, Chicago, Ill.

Rabbit and Squirrel Dog—Mr. N. Elmore has bought for Mr. Chas. H. Chase, of Nashua, N. H., a fine rabbit and squirrel dog.

Douglas and Thistle—Mr. John Davidson, of Monroe, Mich., has sold Douglas and Thistle to a Western gentleman.

DEATHS.

Laird—Hamilton, Ont., Dec. 15, 1890—I had named the Gordon setter recovered from Dr. Niven, Laird. You will be sorry to hear that Laird died on the 7th inst. very suddenly, showing no symptoms of disease.

E. TINSLEY.

ENGLISH FOX HUNTING.—The item to which this caption was given last week, and with which it was intended to appear, was this:

The Chidding fold hounds, of which Mr. J. Godman is master, met at Bromley, near Guildford, on November 13. A fox was soon found, and the hounds were in full cry when,



MAX WENZEL'S CHIEF.

on coming to Alden's Hollow, the whole pack went over the brink to the bottom of the hollow, a depth of nearly forty feet. Two of the hounds were killed, and eight others seriously injured.

CHIEF.

CHIEF is owned by Mr. Max Wenzel, of Hoboken, N. J., and is a very fine, well made Irish setter dog of fifteen months, and his having been trained with good judgement, landed him at the head of his class in the Puppy Stakes. He is by champion Berkley out of champion Duck, both sire and dam being owned at this time by Mr. A. H. Moore of Philadelphia. Chief won second in a class of twenty-seven entries, N. Y., 1880. Hissire, Berkley (Elcho-Loo II.), was whelped July 10th, 1876, being bred by the St. Louis Kennel Club, and has won the following prizes: Hampton, Iowa, 1877, second prize, puppy stakes, nineteen entries; St. Louis, 1878, first prize, open class; also following specials: best brace with his dam, Loo II.; best pair with Loo II.; best kennel with Loo II.; best setter of any age or breed bred in America; best setter bred in the United States. Boston, 1878, champion prize; also specials; best pair with Loo II.; best kennel with Loo II., etc. New York, 1878, champion prize. St. Paul, Minn., 1878, champion prize. Philadelphia, 1879, champion prize; also special for best Irish setter dog; St. Louis, 1879, champion prize, also special, with Duck, for best pair of Irish setters, and special for best Irish setter dog; New York, 1880, champion prize; St. Louis, 1880, champion prize, also special for best Irish dog or bitch in the show

Duck (6209 English Kennel Club Stud Book), the dam of Chief, was imported by E. F. Stoddard, of Dayton, Ohio, and bred by Dennis Reidy, Esq., Castle Island, Kerry County, Ireland. She is by King's Erin, out of Rose. Her winnings are as follows: Before importation, Birmingham, 1875, first prize; Brighton, 1876, second prize; Wellington, 1876, first prize; Nantwich, 1876, first prize, and champion cup for the best sporting dog exhibited. Since importation she has won: St. Louis, 1877, first prize; St. Louis, 1878, second prize; Boston, 1878, first prize; Baltimore, 1878, champion prize; St. Paul, champion prize; Detroit, 1879, first prize; and special prize for best Irish setter dog or bitch; St. Louis, 1879, champion prize, and also special for best Irish bitch and, with Berkley, special for best pair of Irish dogs. It will thus be seen that Chief comes of "mighty purty stock."

The Rifle.

HON. O. F. WINCHESTER.

[From the New Haven Palladium, Dec. 11.]

THE American flags, displayed at half mast yesterday morning from the turrets of Winchester's armory, announced to the gathering workmen and the passers that the genius which had conceived that great enterprise, and the hand that placed in motion its swift flying machinery, lay palest in death. The death of Governor Oliver Fisher Winchester was not a surprise to those who were aware of his feeble condition for the past few weeks, yet, as is natural when a life that has been busy and eventful with enterprises closes, the community stops for a moment to review that life and regret its dissolution.

Although the most active, prosperous and useful portion of the Governor's life has been spent in this metropolis of Connecticut, he was not a native of the State, being born in Boston in November, 1810. Living in Boston under its peculiar influence for a considerable time he naturally became imbued with a knowledge of the importance of education as a bulwark for our republic, for the maintenance and progress of which he gave such tangible support in later life. The early years of his life gave evidence of that energy and enterprise which produced the success which crowned his life-work, and made him such an important factor in the commercial and manufacturing interests of the city of his adoption. At seven years of age he left the city for farm life, attending school in the winter and working upon the farm in the summer. At fourteen, with these limited means of education, he was apprenticed to a carpenter. Faithfulness and broadness of character marked this epoch of his life, as in all subsequent periods of his existence, and six years later he went to Baltimore as a master builder. Although a mere youth he took the contract for building a church, which he consummated with success. In 1837, then twenty-seven years of age, he changed his business and opened the first men's furnishing store in Baltimore. He remained there eleven years, when, in 1847, he came to this city, and since then his life and enterprise have been well known by the older inhabitants of the city. As a natural outgrowth of his business in Baltimore, he invented a perfectly fitting dress-shirt and obtained a patent for it in February, 1848. He immediately began the business of shirt-making, a new business for those times, and was located on State street, in what is known as the old Garfield building, only half of which is now standing. Patronized at first by appreciative friends his business soon increased, culminating in the extensive factory on Court street, between Olive and Union streets, and his partnership with J. M. Davies. The enterprise was a success, sewing machines taking the place of hand labor, and hundreds of thousands of the patent shirts were produced. It was here that the fortune which was the basis of his other enterprises was amassed.

In 1857 he became interested in a new fire-arm invented by Benjamin F. Henry, of Centerville, and a company was formed for its manufacture. The shop was located on Artisan street and Mr. Winchester was a large stockholder. The name of the company was the Volcanic Arms Company. The enterprise did not prove a success, and Mr. Winchester purchased the entire stock and formed a new company in 1860, under the name of the New Haven Arms Company. He was selected as its president, and immediately assumed control of its affairs. This may be said to be the beginning of that great business which is now known the world over, and which has added so much to the commercial strength of the city, giving employment for a longer continuous period of time to more people than any other enterprise ever conducted in this city. A sketch of the rise and progress of this enterprise would almost be a record of the improvement in fire-arms for the past twenty years. Mr. Winchester was progressive and eagerly sought out the latest improvements and inventions, calling to his aid and the aid of the company, at the head of which he stood, the most improved machinery for manufacturing the goods. In 1865 a special charter was obtained, and with a capital of \$500,000 the Winchester Repeating Arms Company was established. New inventions were adopted at this time, and the Winchester repeating rifle soon came to be known as a standard fire-arm. The principal improvement was one designed to facilitate the transfer of the cartridge from the magazine to the barrel. Improvements were made in 1873, and still further in 1876, the latter being called "The Centennial." In 1872 the company began the manufacture of cartridges, which forms a large element of its business. It need not be added that in every respect this enterprise is a success, and brought to the founder and mover of it all a large fortune. This fortune, however, was not for self alone. Mr. Winchester was a liberal man and contributed largely to various worthy objects.

In 1876 he gave to Yale College the tract of land of thirty-six acres north of his residence, for which he paid \$90,000. This was donated for the establishment of an astronomical and physical observatory. This tract of land is one of the most eligible for residences within the limit of the city, and will in time bring to the college many times its cost to the donor. He also contributed liberally to other departments of the college, more especially to the scientific school. He was connected with the Calvary Baptist Church, and assisted materially in the erection of the beautiful house of worship at the corner of York and Chapel streets.

He was a friend to all plans of education which would up-build and benefit the people. As a man occupying a prominent position in the city and always interested in its welfare, he was naturally drawn into politics. His first public position was councilman from the old Fourth Ward in 1853. He was also a presidential elector. In 1866 he was nominated and elected lieutenant governor of the State on a ticket headed by General Joseph R. Hawley for governor.

Governor Winchester early became interested in pomology and floriculture, and, as his fortune increased, made a practical use of his tastes in the beautiful grounds on Prospect street surrounding his residence. These are the most extensive and most beautifully kept grounds in the city. No expense has been spared to make them complete productions and artistic in arrangements. Here in his beautiful and palatial home, surrounded by the luxuries of all that could be accomplished by a skillful gardener sustained by liberal means, Governor Winchester passed the twelve months of illness under the tender care of loving friends and relatives. From the broad windows are extensive views to inspire the heart and please the imagination. To the west and north the rugged front of West Rock, with outlines melting away into the dense forests of Edgewood, while nearer, the great armory, teeming with life, showed its long line of walls and its banners of curling smoke. City and country, forest and plain, meadow and stream blend to make the view a delightful one. Governor Winchester was endowed with wonderful perseverance and indomitable courage; he saw the red and golden streaks of sunshine where to others it was cloudy and overcast. He was a representative of what may be accomplished by hard and honest labor by every American boy. His death was the result of a stroke of paralysis which he sustained about a year since. Although unable for the past twelve months to give his attention to his business, he was confined to the house but a few weeks previous to his death. He leaves a wife and a son and a daughter—William W. Winchester, intimately connected with his father in the arms company, and the wife of Thomas G. Bennett, secretary of the company.

RANGE AND GALLERY.

CREEDMOOR—Dec. 18.—The Christmas match which took place to-day was another of those very attractive contests on the same plan as the popular match which was had on Thanksgiving. The shooting was at 200 yards, State model rifles, and the match was open to everybody. There was some uncertainty growing out of the naming of the match, some of the marksmen having an idea that the shoot was to take place on Christmas Day. There were 119 original entries for the match, and the re-entries ran the total up to nearly 700. The day was very cold and a cross wind made holding somewhat difficult, but with so many excellent off-hand shots present it became necessary to hold very close if any expectation was had of getting into the hundred prize drawers. Rifles were loaned and ammunition furnished free for the match by E. Remington & Sons, and the long list of prizes included many articles of large, aggregate value from leading houses. The conditions made the aggregate of two scores necessary to a record, each score to consist of five shots. Willie Robertson outdid himself and the records of Creedmoor by putting in a perfect score of five consecutive bull's eyes at 200 yards, while another score of 21 gave an aggregate of 46 points. When the scoring had

finished at 4 o'clock, after a very summary and irregular wind-up of the match by the Secretary of the Association, a rush was made for the club house to see the novel drawing for the prizes. Much time was wasted in deciding many equal scores by drawing, a ceremony which might have been performed much quicker without the personal assistance of the shooters themselves. Then came the real pot-luck handicap of the match, for the 150 prizes had been numbered, and from the bag of numbers the shooters drew according to the following scheme. The maker of the largest aggregate to draw ten tickets or numbers from the bag:

To the second man, 8 tickets; third, 6; fourth, 5; fifth, 4; sixth, 3; seventh, 3; eighth, 3; ninth, 3; tenth, 2; eleventh to nineteenth, inclusive, 1; twentieth, 2; twenty-first to twenty-ninth, inclusive, 1; thirtieth, 2; thirty-first to thirty-ninth, inclusive, 1; fortieth, 2; forty-first to forty-ninth, inclusive, 1; fiftieth, 2; fifty-first to fifty-ninth, inclusive, 1; sixtieth, 2; sixty-first to sixty-ninth, inclusive, 1; seventieth, 2; seventy-first to seventy-ninth, inclusive, 1; eightieth, 2; eighty-first to eighty-ninth, inclusive, 1; ninetieth, 2; ninety-first to ninety-ninth, inclusive, 1.

The six tickets remaining went to the leaders in a boy's match shot during the afternoon by lads under sixteen years of age. The boys shot five rounds each, the winning scores being: Harry Overbaugh, 23; J. S. Grohman, 23; H. A. Summers, 20; C. Paulding, Jr., 20; G. D. Brower, 19; Geo. Wingate, 19.

Frank Donaldson, the Secretary of the N. R. A. and originator of the match, allowed his three tickets to remain in the bag until all others had drawn, and found a silk hat and a case of Rhine wine awaiting him. W. E. Wood drew a ticket, which he at once "swapped" for a dollar box of cigarettes, only to find a few moments later that the ticket drew a fine rifle. Adjutant Murphy got an eight-day clock; J. Bohan, a dictionary; \$100 in gold coin fell here and there, General Wingate getting a \$20 gold piece, and Styles and Silvermalt took \$10 each, leaving \$5 gold pieces for A. Beattie, L. S. Stevens and C. Le Bonfillier. G. L. Moran, of the Morse Building, got an order for a new silk hat, a sort of head gear which he abominates. Donnan, who had come all the way from Rahway, N. J., drew a large ice case. A. Steele got a silk hat and three Japanese dolls. N. D. Ward, a Father Mathew man, got a case of Rhine wine. Some queer prizes fell to the boys. Three of them received big boxes of tobacco, and one an order for a silk hat, a tool chest and a photo album.

The scores in the order of merit as determined by the drawing of the list, stood as follows out of the possible 50:

W. Robertson, 46; J. L. Paulding, 45; A. Beattie, P. W. Price, N. O'Donnell, 44; J. H. Sanders, 43; C. E. Alder, J. F. W. Morgan, G. L. Grohman and S. Clarke 43 each; J. T. Dolan, J. W. Maragata, W. M. Baires, J. Cavanagh, N. D. Ward and W. J. Underwood 42 each; J. Myers, J. H. Doughty and H. Douglas 41 each; C. L. Williamson, J. Ross, C. E. Overbaugh, F. H. Holton, C. Van Housen, C. L. Madison, A. J. Howlett, H. T. Farrell, T. C. Williams, R. Simpson, J. T. Seabury, J. R. Doman and J. J. Dixon 40 each; N. Kerr, C. W. Williams, M. R. Master, J. H. Cobb, W. R. Platt and W. Gushing 39 each; A. Beattie, W. F. Higgins, Geo. W. Wingate, G. A. Houry, H. A. Titus, A. M. Miller, 38 each; C. Zettler, J. P. Silvernail, J. Havishaw, J. M. Turner, T. Malpas, C. H. Styles, M. P. Ross and C. S. Shaw 37 each; C. E. Lewis, A. Simpson, C. E. Taylor, G. E. F. Williams, H. H. Jewell and C. Le Bonfillier 36 each; N. Y. Overbaugh, C. Le Bon, G. V. Galliard 35 each; A. R. Grov, W. M. Summers, J. T. Hilton, C. G. Zettler, T. Ryan and S. Parsons 30 each; J. Bohan and J. M. Hyatt 20 each.

NEW YORK SHOOTING CORPS.—A note from the Commandant, Capt. George Aery, informs us of the death of one of the prominent members of the corps, Mr. B. B. Tienken, who has so well filled the post of secretary for fourteen years past. He died after long suffering on the 18th inst., and was buried on the 22d, attended by the corps in full uniform with the usual badge of mourning.

BOSTON, Mass., Dec. 18.—Though to-day was a charming one in every respect, but few riflemen availed themselves of it to pile up a good score at Walnut Hill. The wind was rather hard to control, it being of that peculiar kind that would soften and then blow like a little gale, and all wind calculations were upset at every shot. The snow, however, has disappeared, and no unpleasant effects were experienced from this cause. The spectators were numerous, among them being a lady from the western part of Massachusetts, a Miss Griffin, who from the shoulder made the elegant score of 43 at 200 yards. Only the best records are given:

Credman Match.

H. G. Bixby	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45

Amateur Match.

A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45
A. C. Rathbun	4	5	4	4	5	5	45

Ring Target (100).

F. J. Rathbun	11	10	11	11	11	11	12-108
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104
E. A. Call	12	8	12	11	9	8	11-104

Massachusetts Rifle Club.

F. J. Rathbun	12	11	11	12	12	12	10-114
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109
H. Max	12	11	11	11	12	11	9-109

Ring Target (100).

J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81
J. Nichols	12	7	8	7	9	8	9-81

On Saturday next a special Christmas match will be shot in addition to the regular list.

MANHATTAN RIFLE GALLERY.—Boston, Dec. 17, 1880.—The second week in the anti-rifle match at the Manhattan Gallery has shown better shooting than any week during the season, and the crowd of the Ballard, Stevens, Wesson and Remington rifles has been almost incessant. The gallery was well filled both day and evening during

the week. Mr. J. Merrill now heads the list with an excellent record of 192 out of a possible 200. He was nearly successful twice in getting the \$15 in gold, making two splendid thirty-nines. He made nine consecutive, ending a score of 39 with four bullseyes, and his five first shots on his next score are also bullseyes. He put up five scores which will be hard to equal, although Mr. J. H. Brown, of the famous Empire Rifle Club of New York, was equal to the task. He stopped at the gallery on his way back to New York from his trip East, where he went a week ago with the well-known shot, Milton W. Farrow, who is still there. Mr. Brown showed good work and capital holding, and also made 192, but was outanked by Mr. Merrill. Mr. C. A. Pollard is third with 190, Mr. Frank Hollis is fourth with 189, Mr. H. A. Buck is fifth with 186, and Mr. George Ellsworth is sixth with 185. The subjoined summary will show the standing of the several competitors to date; 50 yards, rounds 8, possible 40, five scores to win or possible 200:

J. H. Merrill	38	38	38	39	39-192
J. H. Brown	38	38	38	39	39-192
U. A. Pollard	37	38	38	39	39-190
Frank Hollis	37	37	38	39	39-190
H. A. Buck	37	37	37	38	38-186
Geo. P. Ellsworth	37	37	37	38	38-186
Milton W. Farrow	35	37	37	38	38-184
C. R. Bartlett	36	36	37	37	37-183
N. W. Arnold	36	36	36	36	36-182
A. S. Stubbs	36	36	36	36	36-182
Geo. D. Elson	36	36	36	36	36-180
Geo. P. Ellsworth	35	35	36	36	36-179
H. E. Armstrong	35	35	36	36	36-179
R. C. Sawyer	35	35	36	36	36-179
A. C. Gossop	35	35	35	36	36-177
F. J. Shaw	35	35	35	36	36-177
O. T. Hart	35	35	35	36	36-176
H. H. Lacey	35	35	35	35	35-174
Geo. E. Lewis	34	35	35	35	35-173
H. B. Furness	34	34	35	35	35-172

Pistol Practice.—This favorite range has also been lively during the week. Many members of the Massachusetts Rifle Association practice here daily with this little arm, and prove themselves capital shots at this range. Mr. Ellihu Wilder has increased his score one point during the week, and he now heads the list with 109 out of a possible 120; Mr. H. E. Armstrong is second with 106, and Mr. P. J. Iaboth is third with 104, followed closely by Mr. J. Miller with 101, but outanked by Mr. Iaboth. There are three prizes in the pistol match, with an extra prize of five dollars for a clean score of eight consecutive bullseyes. The following are the leading competitors with scores to date: 50 feet, rounds 8, possible 40, three scores to win or possible 120:

Ellihu Wilder.....	36	36	37-109	Geo. F. Ellsworth.....	33	33	34-100
H. E. Armstrong.....	36	36	37-106	C. C. Foster.....	33	33	33-99
P. J. Raboth.....	34	35	35-101	F. J. Snow.....	32	33	33-98
J. Miller.....	34	34	36-104	A. C. Goodspeed.....	32	33	33-97
J. R. Scott.....	34	34	35-103	F. F. Minot.....	32	32	32-96
C. O. Barrett.....	33	33	36-102	O. T. Hart.....	32	32	32-95
J. Ames.....	33	33	34-100				

Geo. E. Raymond, Manager.

BRACEDONT, Mass., Dec. 17.—A regular meet of the East Boston Schuetzen Corps was held here to-day. The attendance was large for the day, which was not of the best for outdoor shooting. The cool atmosphere and strong wind off the water proving very annoying to the participants. Only the best scores are given:

C. M. Guthrie	12	11	10	11	8	12	12-109
H. Max	11	11	10	11	11	11	4-102
H. Willett	12	12	10	11	9	9	12-101
G. W. Smith	11	10	12	10	11	8	11-96
J. Mahoney	10	7	6	10	12	11	8-91
F. C. Henry	10	7	6	10	12	11	8-91
O. F. Miller	11	7	6	10	12	11	8-91

MAGNOLIA GALLERY.—The matches have had a large number of entries. Mr. J. C. Rogers has made the brilliant record of 242 in match No. 1. The pistol match has also found many devotees. The following summary gives only the best scores for rifle at 100 feet and for the pistol at 50 feet:

Rifle Match No. 1.							
J. C. Rogers	48	48	49	49	48	48	35-212
C. Wright	47	48	48	48	47	47	35-207
W. H. Farman	46	47	47	47	46	46	35-202
C. Gilman	46	46	46	46	46	46	35-202
F. Brown	46	46	46	46	46	46	35-202
W. Hunter	45	45	45	45	45	45	35-202
J. J. Ross	44	44	44	44	44	44	35-202
T. Tyson	44	44	44	44	44	44	35-202
Rifle Match No. 2.							
J. C. Rogers	45	46	45	45	45	45	35-226
W. Hunter	44	44	44	44	44	44	35-224
C. Williams	44	44	44	44	44	44	35-219
H. Hunter	44	44	44	44	44	44	35-219

Pistol Match.

E. F. Richardson	37	41	39-117
W. H. Farman	37	38	75-113
J. C. Rogers	37	38	75-113
C. Wright	37	38	75-113
C. Williams	37	38	75-113
H. Hunter	37	38	75-113

WAKEFIELD, Mass., Dec. 18.—Afternoon.—The daylight shooting of the Wakefields was good to-day, though there was not much of it. The scores stood at the Medford targets:

George Cheney	6	5	5	5	5	5	6-35
Texter	5	5	5	5	5	5	6-35
Robert Howard	5	5	5	5	5	5	6-35

In the evening, when the bulls-eye had been lighted up, the shooting stood:

Thomas Cahill	5	4	4	4	5	4-31
David Ogilvie	5	4	4	4	5	4-30
W. Daniel	5	4	4	4	5	4-30
W. Daniel	5	4	4	4	5	4-30
F. E. Brooks	5	4	4	4	5	4-30
O. Corcoran	5	4	4	4	5	4-30

The association has selected the following officers for the coming year: President, David Ogilvie; Vice-President, George Cheney; Treasurer, Thomas Cahill; Secretary, Robert Howard; Executive Officers, William Daniel, M. Young, O. Corcoran.

Hop Bitters is a preventive and cure for ague; it is your own fault if you have it.

Dachting and Canoeing.

YACHTING FOR THE MILLION.

Editor Forest and Stream:

NOTHING has given me so much pleasure as the accounts of single-handed cruising that have appeared from time to time in your excellent journal. I have taken to myself last three or four years with the greatest satisfaction. I think that if many of those who can afford large boats would give this manly side of the sport a fair trial they would never have cause to regret it. I have seen larger boats than the one that has now done good service for

several seasons, and I can sympathize thoroughly with those who, in a moment of confidence, have admitted that they were "single-handed" with a "house" advantage. A "house" advantage in this case is in owning a fine large craft with an ample cabin for display and entertainment, there are many opportunities when one would like to sail, but the very thought of what must be done to get a big vessel underway, and the necessary delay before she could "sail away" on her course, cause many to give it up and either hire a sail boat or make sail on their dinghy which many in view of the situation have supplied with a centerboard, and thus get that intense enjoyment of sea, sky and exercise which only complete and competent sailors can get. I do not mean to underestimate the comforts of a large craft, or her ability to get to her destination when the weather warns that a good harbor is desirable, but it too often happens that both pleasure and enjoyment on a cruise, and the "house" advantage, are lost. I do not mean to underestimate the comforts of a large craft, or her ability to get to her destination when the weather warns that a good harbor is desirable, but it too often happens that both pleasure and enjoyment on a cruise, and the "house" advantage, are lost. I do not mean to underestimate the comforts of a large craft, or her ability to get to her destination when the weather warns that a good harbor is desirable, but it too often happens that both pleasure and enjoyment on a cruise, and the "house" advantage, are lost. 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AMATEUR, Maryland.—Use a No. "0" Newhouse trap for skunks. Set near the mouth of the hole, and partially cover with grass and leaves. Bait with a piece of fresh meat. February and March are good months to trap the skunk.

LOWER BUNK, Windsor Locks, Conn.—I. We do not know the name. It is probably one put on a low grade of gun. 2. The price paid was probably sufficient, but of course it is impossible to answer such a question with certainty.

NEUSCHLE, Philadelphia, Pa.—There is no strict line between amateur and professional shooters. There are a number of men who are recognized as professionals; and each club must exercise its option in barring shooters from its matches.

CURIOUS, Chicago.—If your friend is not satisfied of the true nature of the "Dittmar sporting powder" ("refers only to blasting powder") send him one of our pamphlets which contains all the important FOREST AND STREAM articles on the subject.

G. H. T., Mount Kisco, N. Y.—1. Please inform me if migratory quail can be purchased in this country? Where and at what price? 2. Where can 100 native quail be bought and price? Ans. 1. No. 2. We know of no one who can supply them.

T. W. C., New Haven, Conn.—What is the best journal published in Florida giving information about the cultivation of oranges and other fruits of that region? Ans. The *Sun and Press*, published at Jacksonville, will probably give you the desired information.

FUNE, Atlanta, Ga.—You will find West Point, in White County, a good point to start out on a trapping expedition in Arkansas: game there, otters, coons, minks and wild cats. Send stamped envelope to C. L. Lindley, at that place, and he will give you all needed information.

N. E., Granby, Conn.—What class did J. N. Dodge's League bitch Bells win first prize in at Philadelphia, 1879? Ans. Class 42 for league bitches. First prize, \$15. No. 377, Dodge and Baker, Detroit, Mich. Bell (not Belle) white black and tan, one year. Bred by Darwin out of Milley.

J. E., New York City.—Will you let me know the advantages of "hollow pointed bullets"? Are they adapted to target practice? Ans. They are intended to flare out on striking heavy game and by the great shock and tearing of parts produce instant death. They are not used for target practice.

CONSTANT READER, Brooklyn, L. I.—How much will it cost to import a pair of beagles from Europe? What would the duties amount to? Ans. Address E. D. Goldsmith, 58 Wall st. He can give you all information. See advertisement in Kennel column. We do not know the firm you mention.

MELAGRE, There are several patterns of turkey calls. Perhaps some of our Southern friends can instruct you better than we can how to make them. One style, the most simple, consists of a short piece of Spanish cedar through which is driven a nail, and across the head of the nail is drawn a piece of slate.

F. B. H., Elmira, N. Y.—Is there any paper published in the West that is devoted exclusively to sheep raising in California and New Mexico, or any paper that can give me any information on the subject? Ans. Write to the National Association of Wool Manufacturers, No. 95 Silk st., Boston, Mass. We know of no such paper.

J. N., Boston.—1. We can draw no comparison between the two makers, save to say that the English are altogether superior. 2. It has been satisfactorily demonstrated that a 28in. barrel will shoot as well as one of 30 or 32 inches. The only advantage of the longer barrels is the better possible sighting, while on the other hand the weight is increased.

C. S., Muncy, Pa.—1. A No. 10 gauge gun will, other things being equal, shoot better than a No. 12. 2. This is the reason why a distinction is made against the use of them. 3. The 28in. barrel will shoot as well as the 30in. barrel. 4. Your 28in. 8lb. gun will answer for pigeon shooting. 5. Carver is in England. We do not know when he proposes to return to this country.

NEW SUBSCRIBER, New Bedford, Mass.—1. Put your brass shells in a dish with hot water enough to cover them. Then add 2ozs. oxalic acid and let them stand half an hour. Wipe off outside and dry them thoroughly by putting in an oven. Then prime. For oxalic acid you may substitute $\frac{1}{2}$ lb. muriatic acid, as before, and after ten minutes etching rinse, drying before you prime them.

PHILANTH, Harrisburg, Pa.—1. While hunting grouse the other day, after having carried some in my hunting coat, I discovered a curious looking fly in my sleeve. I inclose the same for your examination. Will you please inform me whether it is the so-called grouse fly. 2. Also, whether grouse so infected are fit for use? Ans. 1. Yes. 2. Undoubtedly. The fly does not render the birds less valuable for food.

SHELLS, Boston, Mass.—You omit to give gauge of your gun and it is therefore impossible to direct you about the loading. You can find out for yourself by practical tests with a target for pattern and penetration. The rules for loading vary with different gauges; by experimenting you may satisfy yourself what is required. Use wads two sizes larger than the size of your metal shells. Shells cost \$2 per box of 20.

J. P. S., Leavenworth, Kansas.—1. Can you supply me with Vero Shaw's book? 2. Has he published any article on the fox terrier? 3. Can you recommend a reliable care for distemper? Ans. 1. Address Messrs. Cassell, Petter, Galpin & Co., 606 Broadway, New York. They are the publishers of Mr. Shaw's illustrated book of the dog. 2. Yes. 3. There is no specific remedy for distemper. Each case is different and requires special treatment.

SOUTH WEST VIRGINIA.—1. Where did Frank Forester (Herbert) reside? 2. What was his rank by birth as an Englishman? 3. What were his social qualities? 4. Ought not his Sporting Scenes and works of fiction of same nature to be ranked among the foremost of the kind in English literature? Ans. 1. In this country, at Newark, N. J. 2. He was the son of an English clergyman, William Herbert, Dean of Manchester; and the grandson of the Earl of Carnarvon. 3. Read "The Spirit Crowd" in this issue. 4. Yes. The Petersons, of Philadelphia, publish some of his works.

J. A., Jr., Indianapolis, Ind.—How can I get the California salmon trout which go to salt water and return like the salmon? I would like to introduce them into a stream in Connecticut and have tried to get the Commissioner of that State interested in them, but have failed. Ans. We are not sure just what fish you mean. If it is to be had at all it can probably be obtained from Prof. Baird, U. S. Fish Commissioner, to whom we have forwarded your letter. He has the California, or quinnat, salmon eggs in October and will have the eggs of a trout which unfortunately has several common names in the East. It is the *Salmo trutta* and is called by the following names: "California trout," "rainbow trout," "California mountain trout," "McCloud River trout" and, we believe, "red backed trout." This may be the fish you mean by "California salmon trout."

—Any subscriber or reader of FOREST AND STREAM in want of any kind of carpentering, oil cloths, rugs, etc., can be sure of fair treatment at the hands of John H. Pray, Sons & Co., Boston. Call or correspond with them, and get their prices before buying. It will pay you to try them.—[Adn.]

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Correspondence.

Communications intended for publication must be accompanied with the name of the writer, not necessarily for publication, but as a guarantee of good faith. Anonymous letters will receive no attention. Secretaries of Clubs and Associations are invited to favor us with reports of their movements and transactions, and sportsmen and naturalists are urged to contribute to our columns their experiences and observations.

Address.

All communications, of whatever nature, relating to the business or editorial departments of this paper must be directed simply

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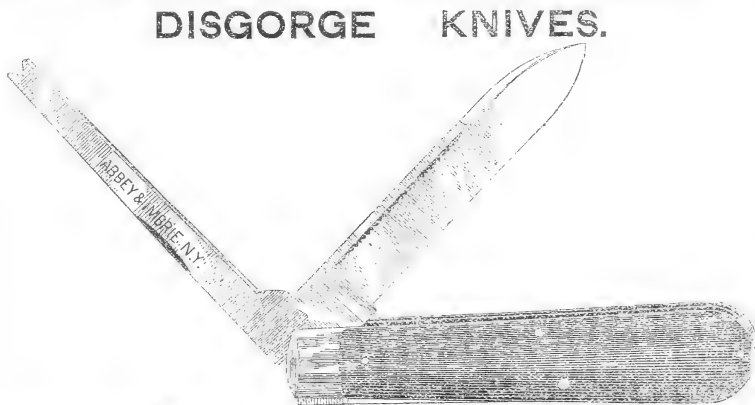
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For Sale.

ADVERTISEMENT.—For sale, a Reilly double Express Rifle, in case with implements complete; has never been used; cost between \$30 and \$40; will be sold low. Address Box 1700, Philadelphia P. O. Dec 23, 90

ANTelope antlers, also buffalo heads; or would make an exchange for a Greener shot gun, ten-lb., ten gauge, and must be a close, hard shooter. WM. A. ALLEN, Canon Creek, Montana. Dec 16, 90

FOR SALE AT A BARGAIN, a triple-barreled Remington-Union double-loading shot gun, 20-inch twelve gauge; seven gauge; seven and three-fourths pounds. For further particulars address **CLAS MILLS**, Lexington, Ky. Dec 16, 90

WANTED, a breech-loading shot-gun; second-hand, but in good repair. Price must be very low. Address Box 675, New Haven Conn. Dec 23, 90

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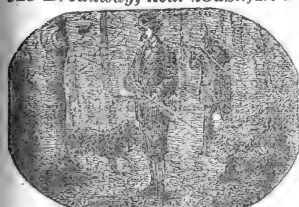


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THE NEW FLOAT TROLLER. Base, 75 Cents; Pickering, \$1.00; Mask-longs, \$1.25. Sent by mail on receipt of price.

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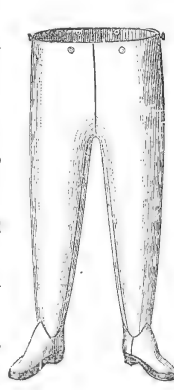
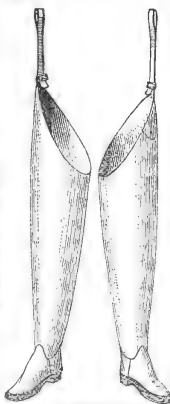
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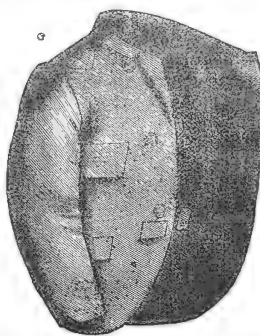
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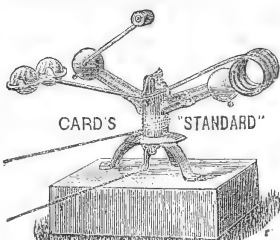
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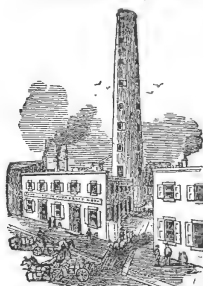
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NEW YORK, THURSDAY, DECEMBER 30, 1880.

Vol. 15—No. 22.
{ Nos. 39 and 40 Park Row, New York.

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FOREST AND STREAM.

NEW YORK, THURSDAY, DECEMBER 30, 1880.

* * * The FOREST AND STREAM goes to press Wednesdays. Correspondents are requested to mail their communications so that they may reach us before that day.

You are making a mistake if you neglect to file your FOREST AND STREAM, and to have the successive volumes bound. They form a library which cannot be duplicated.

—This is an excellent time to call the attention of your friends to the merits of the FOREST AND STREAM. We shall be happy to supply specimen copies of the paper to any addresses which may be sent us for that purpose.

BEFORE these lines meet the eyes of our more distant readers the midnight bells will have tolled the Old Year into the past, and 1880 will have been succeeded by 1881. We wish our readers a Happy New Year.

§ WE INVITE a careful reading of Col. Nicholas Pike's paper relative to the protection of song and insectivorous birds. The writer of that address speaks directly to Long Island farmers, but the facts cited apply to other agricultural districts as well. The system of protection urged for the lands adjacent to the great heterogeneous population of the two cities, New York and Brooklyn, will recommend itself to the good judgment of right-thinking sportsmen.

AMONG THE AMENITIES of editorial life are the kind words of cheer which friends send to us in approval of our endeavors to maintain for the FOREST AND STREAM a high standard of excellence. Especially do we value these expressions of appreciation when they are written by those whose long experience in the active labors of journalism lend an additional emphasis to their words. We publish this week such a letter of mid-winter gratulation, written by Gen. D. H. Bruce, editor of the *Syracuse Daily Journal*. Coming to us as it does spontaneously, and from such a source, it is a compliment indeed.

GAME PROTECTION IN WYOMING.

SOME TIME since we called attention to the formation in Wyoming of a Game Protective Association, and expressed the hope that it might do for that territory the work which was undertaken too late in Colorado.

We are happy to learn on the best authority that the prospects of this new association are most encouraging. The Wyoming Stock Growers' Association is lending all its influence to further the good work, and has in a body joined the Game Protective Association; moreover, the stock growers have pledged themselves as individuals to prosecute violators of the laws, and from such action on the part of such a body of men the best results are to be expected.

The worst slaughter of game in Wyoming does not come from the killing by skin hunters, for in the rough mountains which constitute so large a portion of that territory it is impossible to get green hides to market, as they have to be packed long distances on the backs of mules. Parties of hunters from the East, men who slaughter simply for count and to boast of their bags when they get back to civilization, are the ones toward whom the Game Protective Association must turn its attention.

The great extent of territory to be covered by the Association, and the fact that it is but sparsely settled, make it clear that, no matter how earnestly its members may work, they cannot do all that is necessary in patrolling the country and looking out for law-breakers. What is imperatively needed is a small mounted police force to ride the mountains and take cognizance of the doings of the hunting parties that may be traveling through the country. Mr. Moreton Frewen, now in this city, is endeavoring, with the co-operation of that veteran sportsman, Mr. Sam Ward, to secure a small appropriation from the general government, by means of which such a force may be engaged, and we trust that his efforts may be successful. No one, who has not traveled for successive years through the mountains of the West, can form any just idea of the rapidity with which, in many sections, our large game is disappearing. We trust that Congress may take this matter up and give it favorable consideration without delay. It is one which requires attention.

The amount to be expended is so trifling in comparison with the good that may be done by it, that it is difficult to understand how any thoughtful man can be doubtful as to the advisability of making the appropriation.

THE BRITISH RIFLE CHALLENGE.

THE invitation to visit Wimbledon and contest there in a friendly long-range match, which was sent by the chairman of the Council of the National Rifle Association of Great Britain to the President of the National Rifle Association of America, still remains unacted upon. This is owing to the fact that there has been no meeting of Directors or members since its receipt, nearly a month ago. The proposal to have another American team visit the leading English range meets with general acceptance. One of our contemporaries, expressing its approval of the match, says that "If the mountain will not come to Mahomet, Mahomet must go to the mountain. * * * It must not, however, be forgotten that though America may accept this challenge and a team visit Wimbledon next year, the emblem of national pre-eminence in long-range shooting, the 'Palma,' still remains in America. * * * Until the 'Palma' is won by a foreign team the title of champion cannot pass from America."

Another journal of prominence says of the situation: This communication arrives in good season, and we hope that it will be presented at the annual meeting of the life members in January next for the combined action of the association. * * * There can be no reason why America should not take up the challenge and send a representative team to Wimbledon in June, 1881. American riflemen are well satisfied that unless we send a team to Wimbledon the 'Palma' will have to be placed on the shelf. Yet America, in the face of its numerous victories, can well afford to be magnanimous, accept the challenge and send over a team in 1881. If this letter is placed before the life members of the association there is not a particle of doubt that it will be accepted unanimously, in which case the several committees on practice, ways and means, etc., can be selected from the active workers of the association and the team carried to a successful formation.

The suggestion for a reference of the whole matter to special committees, made up in large part at least of mem-

bers of the association outside of the Board of Directors, is a good one. With such a management there is some prospect of a creditable showing being made at Wimbledon, and if those who are put in these positions of responsibility recognize that there are shooting men in other parts of the Union than New York, and on other ranges than that of Creedmoor, a great stumbling block in former matches will be avoided. If indications are to be relied on this match will be the one which will most try the ability of our shooters. The shooting men in the management of the Wimbledon gathering have not been unmindful of the methods on our American ranges. They have, they think, caught the secret of American team success, and are now prepared to add their experience to our system and assume the position which they so long held at the head of the world of marksmanship. There is no reason, however, for American riflemen to fear more than a close, well-fought battle; and, win or lose, a failure on our part to take up the challenge promptly and in the most liberal spirit can only be attributed to a narrow-minded policy or a prejudice ruinous to the best interests of American rifle shooting. For the first time we have the opportunity to beard the British Lion in his den, and our only ambition should be to give him an effectual reminder that in many points connected with long-range rifle practice he is woefully behind the age.

NOSE AND PACE.

CAN it be true that the breeders of pointers and setters, particularly those of the last named breed, are sacrificing nose for pace? To us, who have witnessed the field trials of this year, this question seems full of interest. While thinking this matter over we have fortunately found, in our advance pages of Vero Shaw's book, a paragraph on the subject that exactly meets our views of this very important point. It is as follows: "In field trials a fast dog looks flash, and by his superior pace can cover more ground, and therefore increase his chance of finding birds. The natural result of this, is that such a dog defeats his slower but surer companion, who keeps steadily plodding on throughout the trial, and would do so throughout the day without a fault, and probably would wear his gay companion down in half a day. That such a thing is done at every trial a reference to the reports thereof will amply testify, and thus, we trust, will have the effect in time of causing steps to be taken to remedy the evil. Field trials are such excellent institutions in themselves, if properly carried out, that every step should be promptly taken to prevent fashionable prejudices from doing any injury to the class of dog which is meant to be benefited thereby."

These are sound words and to the point, and are especially applicable to shooting as practiced in the East. What are field trials for? Are they to introduce to public notice some particular strain or strains of dog that will in a short-lived heat dazzle the eye of the inexperienced sporting public, much as the last scene of the pantomime does the school-boy during holiday week? Are they to be run in the interest of breeders to make a profit, and enable them thus to find a ready market for their stock, or are they to be run for the benefit of professional handlers? Looking at it in one light, it certainly would seem that there was a tendency that way. How many of the *bona fide* owners of dogs run last autumn handled their own dogs, or even could handle them if they would, and how many owners trained the dogs that were run? This is a question that needs no reply. It therefore cannot be expected that owners who, for some reason or another, are not personally acquainted with the individual traits and dispositions of their own stock can be competent judges of how their dogs should be bred for perfect working and the most thorough killing and lasting qualities. We despise a slow, poking dog; yet in a week's shooting we have seen more kinds killed, and a beat swept cleaner over a tortoise of this kind, than over the bounding hare alongside. Of course it is a novel luxury for the tyro, who knows no better, to see a dashing fellow skim after him field after field, until he brings up standing on a bevy of quail or a brood of grouse, and if the net ends there it leaves a lasting impression. But take the slow and sure, the dog whose nose has not been sacrificed for foot, and beat out the same fields and find birds in each which the lightning dog failed to scent and passed, and which is the better dog? If there could be

devised some way at field trials to show up the number of birds passed by these air-splitters, it would rather astonish more than one of the hill-side critics. It has been well said that field trials are new in this country, and to judge from the expressions uttered by "a large majority" of spectators, one would be led to believe that for the first time in their sporting career they had positively witnessed a dog pointing out of a book or a chromo. We cannot say it is quite as bad as what Mr. Winkle said:

"What's the matter with the dog's legs?" whispered Mr. Winkle. "How queer they're standing." "Hush, can't you?" replied Wardel, softly. "Don't you see they're making a point?"

But it is something like this: "How grand," says one. "Glance your eye on his tail, how stiff," says another. "How staunchly he smells them; this is indeed a sight really worth traveling a thousand miles to see," says number three. And these encomiums are paid Master Pido simply because he has pinned some poor wretched, scared-to-death bird, when going up wind, and simply pointed it as he should, "because it's his nature to." It is now the skilled newspaper man gets in his fine work, and shakes the hand of the cheerful owner, whose feelings are way up in the seventh heaven until he is informed that his dog has lost the heat! It is pleasing incidents like this that help to interlard field trials with interest and break in upon their monotony, but it is dreadful humbug nevertheless.

Now, if any one can detect our saying in the foregoing that we do not believe in fast dogs that have good noses, let him write us down as but a sorry sportsman. But what we contend is this: that first of all comes the nose, and that speed is but a secondary consideration. Therefore, is not pace in the Eastern Field Trial rules rated too highly? We advise breeders not to sacrifice nose and bottom to obtain the qualities of a quarter-horse.

"IDLE TIME NOT IDLY SPENT."

IT was tantalizing enough to know that there were scores of eyes surveying our well-placed decoits and winking at each other with airs of superior intelligence, as much as to say "Bless my boots! but that fellow on shore is oppressively fresh this morning. He had better get out in the sunshine and evaporate a little."

They are whimsical fellows; to-day they are inconceivably ignorant, as confiding and verdant as a plow boy on his first visit to town, becoming a victim to the most transparent lures; to-morrow they have become regular sharpers, detecting immediately the game sought to be played upon them; and again, the following day they have relaxed into their verdancy and the simplest fraud deceives. This was one of their knowing mornings, for they evinced an obstinate determination worthy of government mules not to take hold, but even a government mule can, with proper treatment, be prevailed upon to develop decent qualities. Stroke him with the hair and all that sort of thing before emphasizing your language and actions. If that does not suffice put a rope around his neck. The trout may avoid your flies, as impetuous dead beats avoid their creditors, but they can be brought to terms by having some luck, using a little diplomacy and other things. At your first cast, all the care and caution of a suppliant; at your first strike, the manner and action of a dictator.

Like the miller fluttering about the flame did these beauties coquette with the decoits we offered them. It was an exhaustive, almost an annihilator, of patience; but at last we heard an old trout say "Oh! you wicked little fellows, stand aside and let your poor old father show you how the thing is done. Now watch that Grizzly King. Here goes."

The youngsters, inexperienced and boisterous, had been threshing around like so many flails more intent on mischief-making than the more serious and important business of providing for the inner fish; but the old gentleman had a double object in view. First, his idea of cunningness in capturing the delicious looking fly; and second, the more selfish one of pandering to his appetite. Number one was a grand success, for coming up under the fly he quietly and quickly sucked it in and made no splash until the hook, responsive to the twist of the wrist, convinced him that his second idea was an epicurean fizzle. Of course the youngsters stood one side and said "Old Smarty, you have got yourself in a fine pickle and won't be bothering the boys any more. Get out of it, if you can. You are like many an older fellow; think you know it all, but now you have learned that the world moves and that old fish like old fogies may sometimes get left behind. Egad! it is cold to-day."

The old gentleman makes no reply. He had evinced business requiring his immediate attention. He seemed to have pressing engagements everywhere and was trying to keep them all, developing an astonishing amount of energy in the fractional part of a second. It was a regular game of finon now up, now down, and then wig-wag. Merrily whistles the line as away he goes like a courser at the prick of spur. He displayed no appreciation of the esthetic quality of the sport. His conduct evinced a leaning toward the practical. He would condemn theories and escape, no matter how, to the home that he sheltered him for many a year.

"Confound you," he cries, "come over here. I'd like about three minutes of your company and I'd drown you." "You egotistical old scoundrel, you want to get us overboard and cut our throat with your first dorsal fin, but we mean to fight it out here. When ze Frenchman hunts ze tigare,

ah! ze sport is grand, magnifique! but when ze tigare hunts ze Frenchman—ou! ze zero is ze very devil to pay."

Vainly he endeavored to outmaneuver us. All the expedients of which he was master were brought into play, but humoring his eccentricities and scrupulously guarding against any possibility of his escaping a firm, yet yielding, hand nullified all his resources, and then the fatal net enveloped him. Toss him on the green grass. "There he is, fresh as a bride; the Dolly Varden fish, beautiful in its speckled splendor. Silver belly, pink fins, yellow sides 'bedraped' by crimson hail," all marvelously contrasted and blended, and shading off into the deep rich brown of his back and glancing like the rays of a prism.

"Well, this is worth living for!" you exclaim, and can well believe with Sterne that "it is better to do the idlest thing in the world than to sit idle for half an hour." MILLARD.

MAN differs from all other animals in that he smokes, and among men who smoke they are distinguished for their good taste who use Kimball's Vanity Fair. This excellent brand is growing in favor among those who are capable of judging what good tobacco really is. And for this increasing popularity we need not look further than the inherent excellence of the product.

KIND WORDS.

SYRACUSE, N. Y., Dec. 27, 1880.

Editor Forest and Stream:

I have just finished the reading of last week's FOREST AND STREAM, and I cannot resist my inclination to thank you for it; and I am sure that I only voice the opinion of all your readers in expressing the opinion that the paper, as now conducted, is a credit to its editors and publishers, and to American zeal, ability and enterprise. I am sure it has no equal either in this country or in Europe, and so good and instructive a publication might enter every household with advantage to the occupants, for its tone is excellent, its columns are clean, its matter is nearly all well written, and its teachings on various subjects would make a valuable textbook every month. You deserve the congratulation and encouragement of every one of your readers. Editors get plenty of hard knocks and but few compliments, and I want to record myself among the number who have only kind words of approval for your excellent work.

D. H. BROWN.

THE TILSTON MEMORIAL FUND.

New York, December 23.

Editor Forest and Stream:

I have to acknowledge the receipt of further subscriptions to the "Tilston Memorial Fund," as follows:

Previously acknowledged.....	\$168.00
John Hone, Jr.....	5.00
Dr. N. H. Holcomb.....	5.00
Dr. S. Howe.....	5.00
J. W. Bystle.....	5.00
Wm. D. Cook.....	5.00
L. M. Leavitt.....	2.50
M. T. Roberts.....	5.00
Provided, of P. C. O'Brien painting of "English Ship".....	250.00
Less amount paid for frame.....	7.00

TOTAL.....\$187.50
Less amount paid for postage.....20.00

Net amount of Fund.....\$167.50
which was sent to Mrs. Tilston on the 21st inst, and for which we have her receipt. The committee would also give credit to Mr. Willy Wallace for his contribution of printing and stationery, the value being \$25. Yours truly,

FRED. N. HALL, Sec'y.

Mrs. Tilston has recovered \$5,000 from the Harlem Railroad Company, the owners of the Madison Square Garden where Mr. Tilston lost his life. For the injuries sustained by himself at the Garden, Mr. Walter Webb has recovered \$4,500; and this with a generosity worthy of the highest praise he has presented to Mrs. Tilston.

The Sportsman Tourist.

PIROGUING ON THE SQUATOOK.

THIS uninviting and homely little hamlet, scattered about the confluence of the noble river St. John with its tributary the Madawaska, is the portal to a region new, perhaps, to the New York sportsman, but well worthy his attention. The latitude of Edmundston, or Petit Saut, is about three hundred miles more northerly than that of Paul Smith's in the Adirondacks. Not more than seven miles distant runs the line which divides the Provinces of Quebec and New Brunswick, while the neat farm-houses and rich lands which one sees on the opposite shore of the John belong to the sovereign State of Maine.

Here and for many scores of miles up and down the St. John a narrow strip of cultivated land, for the most part rich and carefully tilled for generations, borders each bank of the river, but back of that for hundreds of miles, especially to the northward and northeastward, stretches an unbroken wilderness—a wilderness whose forests, though much stripped of their ancient glory, the pine tree, are still rich with a noble growth of firs and are still the home of the moose and the caribou, while its streams are thronged with aristocratic fish—with the salmon and the trout.

Petit Saut is a typical Upper New Brunswick village. Even on a sunny autumn day like this the aspect of the place is unutterably inhospitable, cold and cheerless. It comprises about forty buildings, including a court-house and a church. But it has no village street, not a shade tree, nor a square foot of turf. Each house stands aloof from every other. Nothing indicates community among the builders. No two dwellings are in a line, but each seems to edge away from the other and turn a cold clapboard shoulder to the rest of the village. Long-legged and long-eared pigs, a hideous breed, are the specimens of animal life most frequently met with on the streets. To enjoy life in Edmundston one must get the village out of sight, either in the recesses of mine host Whitney's comfortable inn, or looking out, with the town behind, on the serene and steady sweep of the broad St. John or the tumult and foam of the Madawaska as it leaps its *petit saut*.

The New Brunswickers up here, Frenchmen though they be, relatives of Evangeline perchance, make no beautiful thing.

But this homely Edmundston is the threshold to a world of rare natural beauty.

It is impossible in this limited space to describe all the trips that may be made from here, trips rich in sport and scenery. From here they start for the "Green River trip," for the "Fish River trip," for the "Squatook," or "Round the Lakes trip." Any of these excursions may be according to the measure with which the tourist or sportsman is blessed with time. It is proposed here to briefly describe the "Squatook trip," *en uno*, etc.

In the region the traveler has his choice between the limberly and readily upset birch canoe and the invulnerable but also as readily upset pirogue. Choose the latter. It consists of a log twenty feet long or more, hollowed and modelled into a scimitar-shaped and most savage looking double bow. But it is a good servant when dexterously managed as it invariably is by the French guides.

These French guides are the very flower of backwoodsman. They are mostly the descendants of those Acadians who, after the cessation of their homes by the peace of Utrecht, fled from the new masters of the soil far into a more hospitable wilderness. They can for the most part neither read nor write, and speak almost exclusively French with variations. For instance, *ver* is "vart" with them, *bien* is "bang," *toi*, "toid," *pres* "pret," *fruits* "fret," etc. Their artificial surroundings are, as we see in Edmundston, excessively homely. And yet—by what subtle influence preserved?—one finds in them, in all their manners, the characteristic politeness and polished manner of the French gentlemen. In sunshine or in storm, dry or wet, fed or hungry, they are always deferential, gracious and *empressée*. It is delightful to hear the courteous tone with which they emphasize "*Merci monsieur*." Ah, their manners are different from those of the no less good guides of Maine and the Adirondacks. Besides, these French guides are scrupulously neat, and give you a clean and comfortable life in comfort. Their are good cooks, very cheap, costing only from one to two and a half dollars a day. At the same time it must be admitted that they are seldom good sportsmen; that in fishing they have a consumable penchant for the seine and spear and are strangers to the fly, and that in hunting they are decidedly inferior to the dirty and unutterably homely Micmac Indians, a few of whom still furnish inspiration for nightmare in these regions.

You start up the Madawaska, a guide apiece, luxuriously reclining in the arms of your pirogue, facing your course, behind you, deftly and swiftly polling you up the steady current, your strong and graceful Frenchman. Amidships are packed the impediments—*but* the guides call them—a tent, utensils and the usual food for a camping party. So you go seventeen miles that day, over fair fishing grounds most of the way, with no notable rapid to obstruct you, and now and then the excitement of a shot at a stray duck, wild or domestic, for along the river bank a single line of farnus fringes the bank. That night you camp on the bank of the stream at the beginning of a portage.

Early the next morning you are awakened by the volubility of the French spoken by a Mr. Lynch, of Cork, who monopolizes the portage business, and who straightway fastens his oxen to the bows of the pirogues and without ceremony hauls them over and through rocks, roots and trees, through the Bearcamp River. Men meaning the pirogues, still intact, are launched in the lake and, after a short bottom of the outlet, Bearcamp Brook—but the brook is not more than three inches deep. Then the guides taking the place of the oxen of yesterday, drag the ponderous craft foot by foot, plowing a furrow between the bed rocks of the stream. It is impossible sufficiently to admire or praise the undamagable qualities of the pirogue. The little brook is beautiful enough, and you may catch a creel full of small trout if you choose to trade about or to launch *au delà* of it, caused by your flotilla; but it is a hard and tedious day's work, and every one is glad when the tent is pitched and you are told that the worst three miles are over.

On the morrow you resume the brook, which is now deep enough to float the pirogues, but so narrow that the dense alders, through which it flows, completely overlook it. For several miles you crouch down and are pushed through a greenwood tunnel. But all this time the stream is growing. At last it suddenly widens, breaks away from the alders in a great pool, and the trip is pleasant and ends. Thence to the end of the trip is plenty of sea-room, and "twenty miles a day," if you like.

Presently, as you float on, with a great silent roar over yellow sand, the Squatook river springs upon the little brook and devours it, and now you are on a noble trout stream none colder nor clearer in the world. It is abundant in water, clear, deep-pooled, well sifted and fed by scores of icy little brooks—an ideal home for the *Salmo fontinalis*, thence day by day you are paddled or poled over beautiful lakes, some of which are superbly wooded. You make your way down stream, and there are more than a hundred miles of it. Scarcely a wilderness in the world can furnish more exquisite lake scenery than that of the Fourth Squatook and Yuladi, more varied and beautiful streams than the Upper Squatook and Yuladi rivers. You pitch your tent whenever and wherever you like. You are not confined to one camp spot as in most other wildernesses. You carry your whole camp easily with you, you live in the entire region, and wherever sport or scenery beckons to you, as you glide along, you pause, pitch your tent, and are at home.

Memories of stationary camps in the Adirondacks are odious, after this *voyageur* life. You can paddle or pole, you can hunt or fish, or, if you like, you can be an idler and lounge in a good seat in nature's theatre, while the reeding banks for hours and hours shift their exquisite scenery for you. Every now and then the excitement of a rapid will rouse you. The rapids are not particularly dangerous, but they look so. At the pirogue yields to the rush, the water, and darts down the boiling and tossing incline, you clasp the boat and cease to feel interested in scenery. But the guides understand the rapids, and to see them stand erect in the stern of the tossing boats, playing the pole with inconceivable swiftness; here dodging a sunken rock, there holding the pirogue in the foam and roar, until a counter current can turn its how into the quiet direction, and then boldly putting up all their force into the very thick of the tumult of waves, is not the least interesting sight of the trip.

Finally, you step out of your pirogue, back at Edmundston again. You have been carried down over a hundred and fifty miles of lake and river, the lakes ranging from thirty to a few miles in length, and the streams from three feet to three hundred yards in width. Speckled trout abound everywhere, reaching as much as seven pounds in weight—in isolated instances. There are quantities of lake trout, *ogou* or tuladi, as they are here called. A few moose, some car-

bou, innumerable bears, thousands of ruffed grouse (fifty is only a fair bag for one man in a day here), spruce partridges, wild ducks, are the game of the region.

To reach Edmundston from New York, go to Bangor, Me., thence to Woodstock, New Brunswick, and thence to Edmundston, all by rail.

People who are getting tired of the Maine woods and the Adirondacks, will find it worth their while another summer to try a "trip" from Edmundston. W. D. EDMONDS.

Edmundston, New Brunswick, 1880.

Natural History

OUR WATERFOWL.

Histrionicus torquatus. Harlequin Duck. Bill in this species very small and short, the whole tip occupied by the nail; the tertiaries are curly. Male in color deep lead blue, fading into brown below; sides of head chestnut, as are also the sides of the body posteriorly; a lengthwise stripe on crown of head, and the tail black. Patches of white are present on the head at base of bill, on the side of the occiput and of the breast and of the tail. Two on the neck, one on each side, almost meet, forming a nearly complete ring. There are other patches of white on the wing, and a collar of the same color about the throat. The speculum is violet and purple. Female less strikingly marked; bluish brown, paler below, and changing to white on belly. A white patch before and one behind the eye. Length sixteen inches.

The little Harlequin is one of the most curiously marked, and one of the most beautiful of our ducks. It is a Northern species and is rarely even in winter taken as far south as New York. Although during its migrations it is found only on the salt water we know that it occurs in the Northern Rocky Mountain region where it breeds. Dr. Coues states that in August, 1874, he found broods still unable to fly on streams flowing into Chief Mountain Lake.

The Harlequin is said to be quite abundant on the Northern coast of Maine and thence northward. On the north-west coast, especially in Alaska, it is also reported as very abundant.

This species is still rare in private collections. It is a somewhat difficult bird to secure, as it is a most expert diver, sometimes diving from the wing at the flash, and being so quick in its movements that when on the water it will often disappear beneath the surface before the shot reaches the spot. On the North Atlantic coast the males of this species are called lords and the females ladies.

Somateria stelleri. Steller's Eider Duck. "Head white with a pearly gray tinge, a green occipital band, and a black chin patch and eye ring; collar round neck and upper parts, lustrous velvety black, the lengthened curly scapulars and tertiaries silvery white on the inner webs, the lesser and middle wing coverts white, the greater coverts and secondaries white-tipped, inclosing the violet speculum; under parts rich reddish brown, blackening on the belly and crissum, fading through buff to white on the breast and sides, where there are black spots. Female reddish brown, blackening below, varied with darker on the head, neck and fore parts; tips of greater coverts and secondaries alone white, inclosing the speculum. Length about 18 inches" (Key to N. A. Birds, pp. 291-2).

Steller's eider duck is a bird of our northwest coast, about which but little appears to be known. Although ornithologists have long known of its existence, comparatively little appears to have been written about its habits, though these perhaps do not differ markedly from those of the common *S. mollissima*. The present species is not likely to come under the notice of any of our readers, except those who reside in British Columbia or Alaska. Any sportsmen, however, who may meet with it would do well to make a note of the fact, and to contribute what additions they can to our slender stock of knowledge of the habits of the species.

Somateria fischeri. Spectacled Eider. "Male black or blackish, the throat, most of the neck, foreback, wing coverts, scapulars, tertials and flank patch white; nape and occiput green; a whitish space around the eye, bounded by black. Female said to be brown, varied with darker, the chin and throat whitish, the eye-patch obscurely indicated; after the summer moult the male is said to be like the female. Length about two feet." (Key to N. A. Birds, p. 292.)

The Spectacled Eider is another Northwest Coast bird, which is not likely to come under the notice of sportsmen. It is said to be common about St. Michael's in Alaska.

Somateria mollissima Dresseri. Eider Duck. Bill with two long processes extending up on the forehead from each side of the upper surface of the bill, the broad feathered surface extending down between them. Male in spring dress white, creamy on breast and tinged with green on the head. Lower breast, belly, back, tail, quills and a forked patch on crown black. Female has bill smaller, and is brownish or chestnut, barred and speckled with black. Length about two feet.

The eider duck is known to every one producing the famous eider down of commerce. It is not particularly abundant with us though occurring in winter as far South as New York, but not in any great numbers. They are usually found associated with the species of *Edemia*, called on the New England coast coots, which in their manner of flight and in some of their habits they closely resemble. On the Mas-

sachusetts coast they are more abundant, and from there northward may even be called common from October to April. Specimens are found occasionally in the New York markets.

The down for which this species is so famed, and which has led to its being semi-domesticated in some localities, is plucked from the breast of the parent birds to cover and keep warm the eggs during the absence of the mother. The American bird was for a long time regarded as identical with the European, but was separated from it a few years since by Sharpe, and this decision appears to have received the approval of our best American ornithologists.

Somateria V-nigra. Pacific Eider Duck. Exactly like the last except for the presence of a V-shaped black mark on the chin.

This species, if such it be, is only found in the North Pacific. It may require to be regarded only as a variety of the common eider duck.

Somateria spectabilis. King Eider. Bill with a squarish knob on its upper surface near the base. Male in full plumage black, including a V-shaped mark on chin, a frontal band and space about the eye; neck, anterior portion of body, part of interscapulars, part of wing coverts and linings and patch on the flank, white; throat washed with creamy, sides of head with green, crown and nape with bluish ash. The female resembles that of *S. mollissima Dresseri*, but may be distinguished by the peculiarities of its bill.

The range of the King Eider is about identical with that of its plainer cousin, and it occurs in winter as far south as New York. Both this and the common eider are sometimes taken on the inland waters of this State and on the St. Lawrence River, and there are several records, we believe, of their capture on the great lakes.

Edemia americana. American Scoter, Coppernose. In the male the bill is shorter than the head and swollen on its upper side toward the base. It is black at tip, the swelling being of a bright orange color. Plumage of male, black throughout. Female has bill wholly black, general color sooty gray, much paler on belly and sides; feet brownish with black webs. Length about two feet.

The genus *Edemia*, to which this and the next two species belong, includes those black sea ducks, known along our Atlantic coast as Coots. In this genus the males have the plumage black, with or without white spaces, and the bills of all are wide at the tip and curiously swollen toward the base, and in the males are highly colored. They are provided with very thick heavy plumage, are good divers, and feed almost wholly upon shell fish. As might be imagined their flesh is not especially delicate, but nevertheless they are shot in great numbers on the coast during spring and fall by gunners, who make more or less use both of the flesh and the feathers. Birds of this group are sometimes found on fresh water.

The Scoter is perhaps the least abundant of the three species of this genus, although it occurs in considerable numbers all along our shores. The full plumaged male is quite a striking bird, but the female is the very reverse. The term Coppernose is strikingly applicable to the male, as any one who has ever seen the living or dead bird can testify. The Scoter occurs occasionally on our inland waters.

Edemia fusca. Velvet duck, white-winged Coot. Bill swollen above toward base, the feathers in the middle line reaching nearly or quite to the nostrils, those on the side not so far; bill black at base with a broad orange or pink tip, shorter than head. Male, black with a spot of white beneath the eye, and a large white wing patch. Female, sooty-brown, paler below and on sides of head and neck, with small white wing patch. Bill, black, rather larger than the preceding species.

The white winged coot is with us decidedly the most abundant representative of its genus. It usually reaches New York and Connecticut waters early in October, and remains until the middle or last of November when it proceeds further southward. On its return journey it does not become abundant until the first of May, and early in June the flocks may still be seen passing to the northward. On the Connecticut shore these birds are called Bell tongue, or Bell tong, coots, for what reason we are unable to say unless from some fancied resemblance of the thick, fleshy tongue to a bell in its shape.

Edemia perspicillata. Surf Duck, Sea Coot, Skunkhead. Snufftaker. Bill swollen on sides as well as above toward base. A narrow strip of feathers in the middle line reaching nearly to the nostrils, but no feathers encroaching on the bill at sides. Bill about as long as head; in the male in life orange, pure white on sides with a large circular black spot on each side at base. Plumage of male black with a triangular white space on the forehead and another on the nape. Female has bill black, the feathers in the middle line not reaching as far as nostrils; plumage sooty brown, fading to pale gray below, with patches of dull white before and behind the eye. Size of the Scoter. Variety *troubridgei*, of the Pacific coast is slightly different with a smaller bill and the frontal white patch smaller.

Two of the local names of this bird are quite striking, and somewhat interesting as showing how readily even the most unobservant people seize on the salient points in a bird's appearance, and from these points give it a local name. Skunkhead, of course, refers to the contrast of colors on the head of the bird, and is precisely paralleled in the name skunk bird, sometimes applied to the bobolink, *Dolichonyx oryzivorus*,

while Snufftaker as evidently points to the bright orange red of the bird's bill about the nostrils.

The surf duck is almost as numerous in our waters as the velvet duck and arrives a little earlier in the fall. On their first coming they pass most of their time far from the shore but later draw into more shallow water where food is more abundant and to be had with less exertion. At this time they are shot in great numbers as they come up well to stools, and fly low over the water so as to afford good shots to the gunners in line.

[TO BE CONTINUED.]

✓ EFFECT OF COLD AND HEAT ON FISHES.

THE following quotations, taken from Dr. Kidder's Report on Experiments upon the Animal Heat of Fishes, will be found very interesting. It had been assumed up to within a short time that the temperature of a fish's blood was that of the water in which it lived, but Dr. Kidder has shown, as already stated in these columns, that this assumption is erroneous and that the temperature of the body is higher than that of the surrounding medium. In his report, published in the Proceedings of the U. S. Natl. Museum for 1879, he quotes freely from different authors to show the different conditions of heat and cold under which a fish may live, and some of these we give below.

Mr. Jesse tells of a friend who saw a gold fish which had been frozen into a block of ice and afterward thawed into life.

Dr. Richardson relates that the gray sucking carp, common in the four countries of Arctic America, may be frozen and thawed out again without injury.

Porch have been frozen and transported for miles, returning to life when thawed, and John Hunter says, "that these (fishes) after being frozen still retain so much of life as when thawed to resume their vital actions, is a fact so well attested that we are bound to believe it."

Mr. J. W. Milner (Assistant Fish Commissioner) had a mud minnow (*Umbra limi* [Kirt.] Gunther) which was frozen within solid ice in an aquarium globe, three or four times, and each time regained its vitality upon being thawed out. Instances similar to the foregoing can be adduced indefinitely.

The only hibernation which is definitely known to occur among fishes, says Professor Goode, takes place in the fresh water lakes and streams of cold regions. The fishes are driven by cold into the deeper waters and there remain in a state of torpor, proportional in degree to the amount of cold which they experience. Hibernation does not appear to be in any case a voluntary act. The fishes do not become torpid of their own accord. They avoid it as long as they can and only succumb when they are deprived of the means of escape. They never become torpid when there are greater depths to which they can retreat.

Dr. C. A. Abbott reports of the fresh water mullet (*Myzostoma oblongum*): "No degree of cold seems to affect the movements of this species, and hundreds can frequently be seen under the ice, moving slowly along the bed of the stream, feeding upon the wilted remnants of pond lily and splatterdock plants. * * * This applies also to our common roach (*Stilbe americana*) which, to a less extent, braves the chilling waters of our streams throughout the winter and, in consequence, suffers from the persecution of the three species of pike (*Esox reticulatus, fasciatus, porosus*) inhabiting our streams."

See also Mr. Rudolph Hessel's observations upon the winter torpor of the carp. This appears to be a true hibernation, during which, although the fish takes no food in some climates from October until March, there is no diminution in weight.

On the other hand fishes are reported as living and thriving in water at an exceedingly high temperature; high enough to produce death by coagulation of the albumen in their blood and tissues, unless there is some provision by which their interior parts are maintained at a temperature lower than that of the surrounding water. As the existence of any protection analogous to that afforded to mammals by the function of perspiration and evaporation seems obviously impossible to animals living in the water, it is difficult to understand in what way such a reduction in temperature can be produced and kept up.

Thus Humboldt and Boupland observed living fishes in hot water thrown up from a volcano and showing a temperature of 210 deg. F.

Desfontaines found a *Chromis* in the hot springs of Cafsa, in Bombay, the water in which showed 30 deg. R. (97.5 deg.), and Shaw afterward saw small mullet and perch in the same springs.

Saussure saw eels, rotifera and infusoria in hot springs at Aise, in Saxony, in 1790, at a temperature of 113 deg. F.

Bruce says that at Feriana, the ancient Thala, are springs of warm water without the town, where he saw small fishes, four inches long, not unlike gudgeons. The temperature is not noted, but he says: "Upon trying the heat by the thermometer I remember to have been much surprised that they could have existed, and even not been boiled, by continuing so long in the heat of this medium."

Facts mentioned by Somerset induced Bronconnet to make some experiments on the degree of heat, which river fish are capable of enduring. Details of the degrees of heat are not stated, but many species lived several days in water too hot for the hand. * * *

Prof. Goode writes: "In warm countries an analogous

phenomenon (to hybernation) takes place, which has been called *astivation*. When the lakes and streams are dried up by the heat the fish seek refuge in the deepest pools, and when they too are dried up they bury themselves in the mud at the bottom and remain torpid until the rainy season refills the reservoirs and revives them."

Day reports that on January 18, 1869, he visited a large tank which was then almost dry, having only about four inches of water in the centre, while the circumference was hard enough to walk on. The soil was a thick, tenacious, bluish clay, from which, fully thirty paces from the water and two feet below the surface, were taken five living fishes. Two were *Ophiocephalus punctatus* and three were *Rhinodonta aculeata*. They were covered with a thick adherent slime. "All were lively and not in the least torpid." Day also reports *Amphiprion cinctus* as having been dug up under similar circumstances. Mr. Whiting, chief officer of the western province of Ceylon, informed Sir Emerson Tennant that he had been twice present when the peasants had been digging up fish of nine to twelve inches long, full grown and healthy, which jumped on the bank when exposed to the light.

Batrachians, tortoises and land snails are commonly found in a torpid state during the hot and dry months, a state which may truly be called *astivation*, but which differs decidedly from the condition of activity described above as observed in buried fishes, and for which there is no very obvious explanation.

The instances cited are sufficient to show that the popular belief that fishes possess no animal heat of their own rests upon well attested observations. At first sight it is difficult to understand otherwise how these animals can undergo the extremes of heat and cold which they have been known to undergo and continue to live. Yet when the adaptability of birds and mammals, whose nominal range of body temperature is so extremely narrow compared with that of fishes, to extremes of heat and cold is fairly considered, the necessity for this inference seems not to be so very obvious. And no one appears to have tried the experiment of subjecting the same individuals to great differences of temperature whereby the immense effect of inherited adaptation would have been thrown out of the account.

THE BASKING SHARK.

SEVERAL years ago a basking shark was captured at Topsail, in Conception Bay, about twelve miles from St. Johns. It was thirty feet in length and fifteen feet in girth at its thickest part. Unfortunately before I heard of the matter and reached the spot the fishermen had cut it up for the sake of the oil it contained. In all the museums of the world there are at present only four specimens of this shark, and had this one been preserved the captors would have got a high price for it, as naturalists take a great interest in this singular sea monster, which is rarely got hold of. Under the circumstances I did the best I could. I secured a portion of the skull which luckily had been cut into several pieces. Some of the vertebrae, the fins, and above all the curious appendages on the gills which are arranged like the teeth of a comb and are believed to serve as filters in collecting from the water the small marine organisms on which the fish lives. I also secured some of the teeth, which are very small, not more than 3-10 of an inch in length—this species of shark being harmless, and living on the minute creatures with which the waters of the ocean abound. I sent a portion of these fragments to Prof. Turner, Edinburgh University, one of the most eminent anatomists of the day. He is Professor of Anatomy in the University of Edinburgh, and author of the article on "Anatomy" in the new edition of the Encyclopedia Britannica. He was very pleased to receive these portions of such a rare fish, and he has written a paper on them he presented an elaborate paper on the subject, which he communicated to the Royal Society, Edinburgh, in March last, and which he has since published in the *Journal of Anatomy and Physiology*, Vol. XIV.

In this article he says: "Having been engaged some years ago in the study of the structure of whalebone I was desirous of examining these appendages in this shark to see if they corresponded in structure with the plates of Balen. It was with great satisfaction, therefore, that I received from the Rev. H. Harvey, of St. John's, Newfoundland, during the autumn of last year along with a number of other interesting objects of natural history presented by him to the Anatomical Museum of the University, a portion of one of the comb-like fringes which he had removed from the gills of a basking shark captured off the coast of that island. The specimen of the comb-like appendages of the basking shark presented to me by the Rev. M. Harvey was 5½ inches long. It consisted of 154 flattened plates which varied in length from 4 to 5 inches. Each plate possessed a semi-lunar base attached to the mucous membrane of the branchial arch, and this membrane passed for a short distance between the bases of the plates. The plates were grayish brown in color and with a smooth, shining surface, and they were so brittle as to be easily snapped across. The general arrangement of the plates was, indeed, not unlike that of plates of whalebone, and it may be said that they fulfil the office so generally ascribed to them of readily allowing the passage of water through their interstices, and of preventing the passage of small organisms which may be suspended in the water. When the semi-lunar base was examined microscopically it was seen to contain a network of canals. The anastomosing network of canals was prolonged from the base of the plate into the slender shaft, where the canals terminated in a single elongated cavity occupying the centre of the shaft. The solid matrix of the plates was translucent, somewhat granulated character one sees in the matrix of bone or the dentine of teeth. The matrix was permeated by multitudes of fine branching tubes. These tubes had the appearance and general mode of arrangement of dentine tubes, but they were nearly twice as large as the tubes of human dentine and were separated from each other by a larger proportion of matrix."

After a minute and lengthened description which could only be appreciated by students of anatomy, Professor Turner arrives at the conclusion "that the structure of these

plates leaves no doubt that their type of structure resembles the dentine of a tooth," and "therefore these plates differ in a marked manner from those of whalebone."

"Along with the comb-like branchial appendages Mr. Harvey also sent me a portion of the dentary border of the jaw with the teeth *in situ*. The teeth were arranged in seven rows and were embedded at the base in the mucous membrane. Each tooth was not more than three-tenths of an inch long and a little less than two-tenths of an inch wide at its base. They were conoid in shape, with sharp-pointed free ends, somewhat flattened on the anterior and posterior surfaces, and without serrations. In its structure the tooth, like the semi-lunar base of the plates of the comb, consisted of a hard, translucent externally, and of a central cavity in which were numerous anastomosing canals surrounded by a matrix containing characteristic dentine tubes. These canals collectively represented the pulp cavity. The chief difference between the plate and the tooth was this, that in the plate the canals formed ultimately in its shaft only a single central cavity, while in the tooth the anastomosing arrangement of the canals was preserved up to the apex of the core, and no single pulp cavity existed."

Professor Turner concludes his paper in the following terms: "The presence of bodies possessing the structure of teeth on the gills of the basking shark is not so aberrant an arrangement as might at first sight appear. It is well known that a row of teeth is situated on each branchial arch in many of the osseous fish, so that there is a tendency among fish for dental structures to arise in connection with the mucous membrane covering this part of the skeleton. The peculiarity in the basking shark, therefore, is the excessive development which the branchial teeth undergo, a development which is correlated with the small size and simple form of the maxillary and mandibular teeth, with the non-predacious habits of the fish and with the particular nature of the food on which it lives." He remarks on the fact that hitherto though "scattered notices of these curious fringes have appeared in the periodical zoological literature of various countries, systematic writers on fishes have in their treatises ignored the existence of these appendages, notwithstanding their importance in connection with the food and habits of this shark, and their constituting a most important structural peculiarity."

The publication of this important paper by Professor Turner will remedy this defect, and will have the effect of calling the attention of naturalists to one of the most curious and interesting arrangements in the economy of this inhabitant of the world of waters.

St. Johns, N. F.

M. HARVEY.

ANOTHER CAPTIVE WOODCOCK.

MONTREAL, December 17.

Editor Forest and Stream:

A gentleman yesterday picked up on one of our up-town streets a live woodcock. The bird is still alive and is in perfect condition as regards flesh and plumage, being quite equal in size and weight to the birds we get toward the close of the season here, that is about the end of October. He, however, had a wound across the skull, at the root of the bill, which may have been made by a telegraph wire or a shot striking him sideways. Where this bird came from is a mystery. The latest date at which woodcocks were killed in this vicinity this year was about the 10th or 12th of November, which is later by a week than usual.

Since the 14th of November we have had enough snow for constant sleighing, and the mean temperature in the day time (8 A. M. to 6 P. M.) has only been above the freezing point for eight days during that time. Of course, if the mean temperature for the twenty-four hours were taken, the figure would be much lower; but I have not got the statistics at hand. From this it will be seen that the weather has been so severe that it is most incredible that a woodcock could have existed through it.

Some of our local sportsmen are of opinion that this bird has been lying near a spring in the thick recesses of a swamp, or other warm place, where he managed to pick up a living, while others think he must have escaped from captivity. Many of your readers here would be glad to have your opinion in the matter.

The bird is now in the possession of Mr. W. V. B. Hall, restaurant keeper, St. James street, east wall and appears to feel quite at home.

II. R.

The woodcock I wrote you about the other day, which was picked up in the street here one week ago, is still alive and "doing well." It has been well supplied with worms and with a quantity of raw meat, both of which it eats with apparent relish. To-day many persons were greatly interested at seeing it "boring" for worms.

Mr. Hall, who has the bird in his possession, requests me to ask, through your columns, for information as to the best kind of a cage to keep the bird in; also as to the best method of giving him food, whether or not he should have access to water, and, in fact, for any reliable information regarding the care of woodcock in captivity. Perhaps some of your readers may be able to supply the desired information.

II. R.

We presume that the bird has been living, as suggested, near a warm spring hole in a swamp, and that he hurt himself by flying against a telegraph wire, when at last he was obliged to start for the south. He is certainly a very late bird, though not altogether unprecedentedly so. We once started a woodcock in Connecticut Dec. 24.

If the cage for the bird is to be a large one it should be low, and should be lined on top and along its upper sides with cloth, so that the bird may not injure himself by flying against the wires and sides. The larger the cage the more likely the bird is to do well, but the wilder it will remain. The cage should not, we think, be over a foot or fifteen inches high. The bird should have water, of course. Some interesting facts in regard to this bird in captivity will be found in the *FOREST AND STREAM* of August 12 and 26, 1880.

Please keep us advised as to the welfare of the bird.

PINE GROSBARK IN MINNESOTA.—Boston, Dec. 19.—On the 11th December I received from my friend, G. F. Benson, Esq., Lake City, Walsh County, Minnesota, a fine specimen of grobsark (*Pinicola enucleator*), the only individual of this genus seen in this locality for twenty years. It is perhaps worth noting.

W. P. M.

MORE ABOUT SQUIRRELS.

IN the interesting article of "Antler" in your issue of December 2, 1880, entitled "Something About Squirrels," he mentions the respective habitat of the gray and black squirrels as being distinct. However it may be in Tennessee, they certainly occupy the same hunting grounds in some sections of this State. In my last exploit at squirrel shooting near Memphis, Onondaga County, I bagged five blacks and seven grays within a square mile of territory on the same day. In Chataqua County, a few years ago, I saw in a single stroll eleven blacks and not a solitary gray. In the more easterly county of Saratoga the grays seem to preponderate, although I once shot a couple of blacks there. The guides in the "Brown Tree" country tell me that they never see the black, although the gray is an occasional visitor.

Parke and Godwin (I think) Audubon mention the young of the black and gray being found in the same nest. I have never seen this actually verified, but should suppose the natural result of such a cross would be an albino. Some time since a pile of this sort was mentioned in your columns. It has always seemed to me that the main diversities between the two species (or colors) are that the black is slightly less in size and more agile and shy than the gray. I have also observed that the black always "drives" or chases the gray.

The wide range of this interesting wood denizen is somewhat curious. In New Granada, Ecuador, Peru and Northern Chili I have shot a gray squirrel of about the same size and general contour as ours, the only apparent difference being a white circular spot, of the area of a silver half-dollar, commencing just back of the ears and extending over the neck and shoulders. They bark or "squal" like our own species, and plunder the "cactos" and fields in the same reckless style. Although usually found in the high woods there, yet I have seen them on the cactus plains, miles away from umbrage or water. In the latter locations they probably feed on the juicy and acrid fruit of the cactus plant, as there is no other sustenance, even for a horned toad, in such arid plains. The little rascals are termed in those Southern latitudes, according to locality, "Arillos" or "Monos." We Yankee hunters used to style them "Padres," from their fashion of back-hair, much to the holy horror of the natives. Seneca Falls, N. Y., Dec. 8.

E. R. WILSON.

The black and gray squirrels are regarded merely as different colors of the same species. The South American form referred to is an entirely different species.

I wish "J. E. L." (Nov. 10) hunting ground had appeared to enable me to locate the place of his large squirrels. I think his scales may have weighed incorrectly to have an average of 1 lb. 14 oz. for black and 1 lb. 10 oz. for gray squirrels. I have never seen black ones so heavy anywhere, nor gray ones either, except in Wisconsin, Illinois, etc. The large fox squirrels of these States will hardly average 1 lb. 14 oz., unless all are old ones. I have weighed strings of five, six and seven, and the average was 1 lb. 10 oz. for the large gray of Wisconsin, and 1 lb. 14 oz. for the fox. I would estimate the weight of the black at about 1 lb. 14 oz. They seem about the same size wherever I have found them, but smaller in Canada if anywhere. I cannot say my scales were correct, but it strikes me they were. At any rate the fox is fully one-third heavier than the black. I will take the trouble to find his weight soon and report it.

While hunting in Wisconsin this fall I killed a black squirrel (it appears) nearly as large as the fox, but on examining closely I found him to be clearly a cross of the fox and black, which accounted for his size. So in Central Illinois I charged to kill another specimen of this cross, and nearly as large as the fox, but the smaller jet-black parent I did not see, and of about two-thirds the size of these killed. Winchester County, N. Y.

II. W. M.

Many years ago it was my fortune to shoot two gray squirrels of such extraordinary size as induced me to weigh them. One, 25 inches in length, 2½ lbs.; the other, 26 inches, 2½ lbs. I have since shot many hundreds, but none exceeded 2½ lbs.

C. J. W.

LOCKED HORNS.—A correspondent who writes from Toronto, sends us a cutting from a Peterboro' paper as follows: "Mr. F. Lillipap, of Laketfield, made a very strange discovery last week while hunting in the woods in the vicinity of the boundary between the township of Harvey and Burleigh. His attention was arrested by a large gathering of ravens and crows, which were holding high carnival in a large open field. The rabble called his curiosity, and a close inspection was made, when the carcasses of two very large bucks were found lying on the ground with their horns entwined or locked. It was quite evident that these deer had been engaged in a deadly combat. In this fight their horns must have interlaced, and in this position the stronger had thrown the weaker on to his back. This change of position created a leverage which fastened the two sets of horns inextricably together, and the strong could not get away without any possibility of escape, as victims to their own pugnacity. Some of the hunters went the next day and secured the two sets of horns, but the carcasses were useless."

Such occurrences are not so uncommon as to excite any very great surprise, though of course they do not often come to the notice of hunters. We have seen a few pairs of horns so locked, one of which resisted all efforts to separate them.

HABITS OF THE BEAVER.—I see your Canada correspondent gets after me on the beaver question. All right. Let every gray-haired hunter of the Eastern, Western or Middle States who has killed his hundreds of deer, reflect on the many regions he has hunted in where deer were fairly plenty. Were there not old "beaver dams" in every section? And were there any beaver in the last deer he passed? I rather like even the idea that I got my toes into fifty, though I never cut in Pennsylvania that can offer very fair deer-hunting. Each and all can show the old beaver dams, but I cannot find that there has been a live beaver in any of them in sixty years. I know there are some beaver in Canada; I think there are a few in Northern Maine, also in New Brunswick and in the South. These are the exceptions, and they will vanish long before the last deer has passed. I rather like the idea that I got my toes into fifty, though I never cut in New York or Chicago. I would as soon live in Bedlam as either of them. Have spent ten days in the deep primal forest where I never spent one in cities or large towns, and

have lived more in bark or even brush shanties than in hotels or boarding-houses.
But *inimporte*.

NESMECK.

A QUESTION ABOUT RUFFED GROUSE.—*Hills of Ligonore, December 13*.—If the female ruffed grouse is driven off her eggs during the period of incubation, in what way does she make her exit from her eggs and nest? Is it by taking wing and bounding off, or by taking heel and running away? And in what manner does she return back to them again, on foot or on the wing? I stand ready to answer these questions correctly when called upon, but before I do let us have the views, opinion and experience of other sportsmen and ruffed grouse shooters on the subject.

HARRY WOODLAND.

We have seen the female ruffed grouse leave her nest, but before giving our experience we would like to hear from others.

WEIGHT OF BLACK-TAILED DEER.—I have a very reliable story told me from New Mexico, where a black-tailed deer is said to have been shot weighing about 500 lbs. What is their heaviest weight?

G. B. R.

Black-tail deer probably never reach any such weight as that mentioned, and we doubt if they ever run much, if any, over three hundred pounds. We should be glad to have some definite facts from our Western readers on this subject.

LATE KINGFISHER ON LONG ISLAND.—*New York, Dec. 20*.—*Editors Forest and Stream*: While walking near Flushing, L. I., yesterday afternoon, I was very much surprised at hearing the cry of a kingfisher, *Ceryle alcyon*, and a moment afterward I saw the bird perched on a branch overhanging a brook in the swamp.

The only open water being a part of this same brook, everything else being frozen, it seemed almost incredible that the bird could obtain the requisite amount of food. Is it not very late to observe this bird on Long Island?

ROBERT B. LAWRENCE.

Fish Culture.

THE CENTRAL FISHCULTURAL SOCIETY.

FIRST DAY CONTINUED.

THE discussion on the subject of securing national legislation for inter-State waters, such as the Mississippi River and the Lakes, having closed Mr. Miller offered the following resolution:

Whereas, This society has lost a valued member since its last meeting in Prof. James Wood Milner, of Waukegan, Ill., an assistant to the U. S. Fish Commissioner, who was both a fish culturist and a scientific man, therefore be it

Resolved, That the Secretary of this society prepare a letter of regret and enter it in the records of the society, and send a copy of it to Mrs. Milner. Carried.

Mr. CLARK moved that no papers should be read before the society except those prepared by persons who are members of it.

Mr. FAIRBANK.—"That seems to me to be hardly fair. I have written to gentlemen who are not members asking them to write us something to be read here, and have no doubt that such letters would be interesting."

Mr. CLARK.—"Mr. President, before putting the question, I ask to be allowed to explain my motion and the reasons for making it. I can see that such letters will be interesting, but hold that the writers should become members of this society in order to obtain the privilege of either reading papers before it or of sending them here to be read. I make this motion entirely in the interests of the society, with the object of increasing its membership and thereby extending its influence. I do not know who, if any, outside of the society, have sent papers and hastened to make the motion before such papers were made known, in order to prevent the motion from having a personal application."

Mr. BARTLETT.—"I object to the motion, and would invite papers from all who may feel an interest enough in our good work to prepare one and send it to us."

Mr. MILLER.—"I would make all who send us papers honorary members of the society."

Mr. FAIRBANK.—"I hardly think it would be wise to pass this resolution. We might get some of our most valuable hints from outside the society."

Mr. CLARK.—"I am willing to admit this, but think that since the admission fee has been reduced to one dollar, and the annual dues to fifty cents, the least a person who is interested in our cause can do is to join us. I have no paper to read, and will be glad to hear all that others have to say on the subject, but there are men here who have come nearly a thousand miles at an expense of time and money to be present here and it does not seem fair to admit others who stay at home to equal privileges, and I would compel these men at least to join the society and help support it by the small sum named, even if they never attend the meetings."

The President then put the motion and it was lost.

Mr. MATHER proposed Prof. Spencer F. Baird, U. S. Commissioner on Fisheries as an honorary member. Carried.

Mr. BALLOR found no power in the constitution allowing the society to elect honorary members.

Mr. MILLER moved that the constitution be amended so as to allow of the election of honorary members by a majority vote and that Prof. Baird be enrolled among them. Carried.

The Secretary then read a communication from Mr. H. W. Welsher to Mr. N. K. Fairbank as follows:

There is no longer any doubt in regard to the impregnation of California salmon eggs that have been reared in fresh

water. I have impregnated a few hundred, which now show embryo fish plainly to the naked eye.

Mr. MATHER.—This note of Mr. Welsher's is a most important one. It proves that the California salmon not only live and thrive in the fresh waters of Geneva Lake, Wis., but that they develop eggs and will breed there."

Mr. MILLER.—"I have known of this some time. We have in the ponds of the Michigan Fish Commission some salmon which have spawned a few eggs. Mr. Welsher's case is more interesting because he has more."

Mr. FAIRBANK.—"This subject of the growth and spawning of the quinnot salmon in fresh water is a very interesting one to me and I will have something to say upon this subject to-morrow, when I will have my experience written out in the form of a paper which I will prepare."

Mr. LITTLE exhibited a drawing, in full size, of the fish which was recorded in the pages of the FOREST AND STREAM of Oct. 7, 1890, as follows:

GENEVA LAKE, WIS., Sept. 23.

I have sent to-day to Prof. Baird a very fine specimen of a California salmon weighing eight and a half pounds, a female, full of developed ripe eggs. She was taken by Mr. Welsher, who has charge of my hatching and ponds here, on Monday last, in the small creek which empties into the lake. The day before he saw seven or eight together, which he judged would weigh from eight to twelve pounds each, but had no means of capturing them at that time. It begins to look like breeding salmon in fresh water, but I shall not assert it for a fact until I know; but I will assert my belief in it now. I do not believe that salt enters into, or is an essential element in the problem. I believe that with clear, deep water, and plenty of food, the salmon will propagate in fresh water.

N. K. FAIRBANK.

Mr. CLARK.—"It is of great interest to know that this fish will breed in deep, cool lakes. I have kept them in small ponds in great numbers, as many as ten thousand, and never found a ripe female, although ripe males were common."

Prof. S. A. FORBES, of the Illinois State Laboratory of Natural History, then displayed a series of oil paintings of Illinois fishes, from which the plaster casts of the Institution were to be colored, which were much admired. Also a few of the casts which were colored.

The meeting was then adjourned until the next morning at 9:30.

[The entire proceedings, papers and discussion will follow as fast as we can find room for them.]

REPORT OF THE TENNESSEE COMMISSION.

THE following is the report of Commissioner George T. Akers to the Governor of Tennessee. Mr. Akers has done much good work at no expense to the state, and we think it is time that he had an appropriation to enable him to go ahead and fill the water with food for the people:

NASHVILLE, Tenn.—To His Excellency, Gov. Albert S. Marks: Sir—My report as Fish Commissioner must necessarily be brief. No previous General Assembly having ever made any appropriations to enable the Commissioners to engage, to any extent, in replenishing the streams of the State with desirable varieties of food fish, they have been unable to do anything in that regard.

Hon. S. F. Baird, Fish Commissioner of the United States, has, on his own account, within the last three or four years, placed some shad fry in the Cumberland River, and salmon in the Tennessee River. How these have done I have no present means of knowing, but from the results in other streams and localities I have no doubt will prove, in due time, a very admirable addition to the fish supply of those streams.

The U. S. Commissioner, last winter and the present, has had the kindness to send me for distribution in this State, eleven hundred German carp fry, which I have sent to various points in our State, gratuitously. The reports I have from those distributed last season are of the most encouraging character, representing them as healthy and growing exceedingly well. I certainly have high expectations of the outcome of this new variety of fish. In addition to being a choice fish for the table, they are adapted to ponds, pools and small lakes, and thus can be localized and multiplied to any extent, which is not so much the case in those requiring swift-running water. They require but little attention, are very prolific, and grow to large size. The persons who now have possession of them in this State most generally assure me they have good and wholesome habits for them, and being able to protect them on their own premises, it is hoped the liberality of Prof. Baird will result in such increase that in a comparatively short time the State may be generally supplied with them. Having been furnished at the expense of the General Treasury and myself I have held that those who received them are in some sense custodians of them for the public, at least so far as to furnish the fry to others when they have reached the period of multiplication. I have great hopes of the fry becoming the chief home growing fish for the table in our State.

The artificial propagation of the best varieties of fish is no longer a matter of speculation or experiment. It is as simple and certain as the reproduction of any land animal, and has become a fixed industry. All the streams of our greatly favored State are largely depleted of their once abundant supply of game fish.

In a few years, and at a comparatively small expense, they all might be restocked and refilled with bass, j-cat, trout and the larger and better varieties of perch.

Virginia has tried it successfully. Streams in that State, which a few years since were useless, now are full of the choicest kinds, easily obtained and cheap to the consumer.

Tennessee might easily do the same thing. But to do so, it will require the expenditure of some money in the establishment of one or more hatcheries. The amount of money required would not be great, compared with the great benefits derived.

After the work of stocking our streams is accomplished, the hatcheries might be abandoned, or sold to individuals to be continued as private enterprises.

In the event the Legislature should consider favorably such a work there is one essential and indispensable prerequisite, and that is the enactment of laws, protecting fish in every stream in the State, from the least to the greatest, and from

their sources to their mouths, or as far as they may flow within the State. Without such protection by stringent laws, rigidly enforced, I undertake to say that you can accomplish nothing. Our laws heretofore have been partial and local, whereas they ought to apply everywhere in the State.

To illustrate, protect fish in Maury and Bedford counties only, and you can never stock Duck River with fish; because Coffer, Marshall, Hickman and Humphries will be at liberty to take out all you may put in.

Local protection is not protection. It must extend equally everywhere within the State to be of any value whatever.

The Virginia authorities are at this moment deterred from attempting to stock the streams in her southwestern borders, which flow into Tennessee, for the sole reason that our State offers no protection to them after crossing the line, and they regard it as a waste of time and means to send fish into those streams.

If this connection I will add, that while the establishment of hatcheries would, in my opinion, be the quickest and best way to replenish our streams with the better and more choice varieties of fish, and heartily recommend that course for adoption; yet, I believe that adequate laws for protection of the fish in our waters would enable our native varieties, in the course of time, to multiply and become abundant, so that they would be easily and cheaply obtained. Whether anything else is done by the present General Assembly, I would most earnestly and urgently appeal for the passage of laws for the protection of fish in all the waters of our State from the wholesale and often wanton destruction, which had been so long practiced as to render our waters, in many places, almost entirely bare of this wholesome and palatable article of food and healthful object of sport and recreation to a great many of our work-wary people.

If such laws are enacted and enforced we could reasonably call upon the United States Commissioner for a share of such as he finds do well in localities here. He has already signified to me that he would cheerfully give us the aid he could in supplying land-locked salmon, which would do well in our waters, and other fish desirable, if the authorities of the State would bear the expense of distribution and give proper protection.

When the fact is understood and appreciated that the main object proposed is to provide a plentiful supply of cheap and wholesome food, for the use of all, rather than furnish an opportunity for sport, the scheme will be heartily approved.

Very respectfully,

Geo. E. Akers,
Fish Commissioner.

FISH CULTURE IN NEW HAMPSHIRE.

I SAW in FOREST AND STREAM a letter from a New Hampshire correspondent speaking of a peculiar disease he had noticed in certain fish taken from Webster Lake, in Franklin, viz., small hard concretions or lumps scattered through the flesh of the fish. A few days afterward I met the gentleman who wrote the letter in the cars and told him that when I got an opportunity I would write you and tell you of a similar case which I noticed some forty years ago in the perch and sunfish (*Pomoxis vulgaris*) in Cold Pond, in this State, lying in the towns of Asworth and Unity. It think it was in 1840 that in company with half a dozen other boys I visited this pond for a day's fishing, which, so far as quantity went, was a very successful one, as we caught a good round bushel of the above named fish, but forgetting them home and cooking them they were found to be entirely inedible, being full of these little hard concretions, about the size of No. 10 shot, not only in the flesh but in the membranes of the fins between the spines. It was not till many years after that I had an opportunity to visit that pond again, and then in 1866, I think. We found the fish all right, but in much fewer numbers than at the date of my previous visit. What the precise disease was I never knew, but of its existence and final disappearance I can affirm. I notice one or two other things in my last number of FOREST AND STREAM which have brought my pen to my hand this morning. I also notice a letter from Mr. Ferguson Haines, of Biddeford, Maine, in regard to stocking the Saco River with salmon. Two years ago the New Hampshire commissioners placed 20,000 young California salmon in the head-waters of that river, which are in the State of New Hampshire, and if Mr. Haines can get the young fish from Mr. Stillwell or Mr. Smith he had better plant them in New Hampshire, say in Conway or Madison, whence they will push their way down the Saco and return in due time. If proper sluiceways are provided in the river at the dams in Saco and Biddeford and other places in the State of Maine. We have not taken as many salmon at Plymouth this year as we expected to, owing to the severe drought in the Penigewasset, which kept back the later run of fish, but we took nineteen, running from ten to eighteen pounds weight, previous to July 9, and only three after that date. From these we secured over 60,000 eggs, and there have been a large number of them undoubtedly deposited naturally in various places in the Merrimack and Penigewasset by the salmon which have been seen in numbers all through the summer, in the deep holes and at the mouths of the spring brooks, all the way up the river, from Lawrence to New Hampton. The State of Massachusetts has just sent 200,000 salmon eggs from the Penobscot to the Plymouth hatchery-house, and we expect more, so shall undoubtedly turn out 300,000 young salmon in the head-waters of the Merrimack next spring. In addition to these, we expect to distribute 100,000 brook trout and 100,000 Scholiodon salmon, and we have made a new venture by taking 100,000 eggs of the fish commonly called the "shad water" at Lake Winnepesaukee, which fish is neither more nor less than a genuine "coregonus," or a local variety of the whitefish, which is a native of Winnepesaukee. These we shall divide with Massachusetts, and hope to naturalize in other of our New England waters. We expect to hatch and plant at least 750,000 young fish of different varieties next spring. One more thing. I see a letter from Mr. Bedford about spawning lobsters. We passed a law in this State in 1878 prohibiting entirely the taking of female lobsters while carrying their spawn, and it would be well if the other New England States would follow our example.

W.

INTELLIGENCE OF CARP.—We are permitted to publish the following letter written from Roslyn, Queens Co., N. Y., to Mr. Eugene G. Blackford, State Fish Commissioner:

"The carp came in good order this A. M., and I have just been to the pond and with my hired man, broken the ice and taken them to the mill where they are now being held in evidence of their nationality—I call them 'German Philosophers.' They really showed something more than instinct—intelligence—for they quietly arranged themselves in a semicircle, a deliberative assemblage, and took to the situation. They did not shoot away 'pell mell,' but after a few seconds

moved, as if to the manor born, in a dignified way toward the decayed leaves and mud at the bottom.

"I know you would have been interested or amused had you seen them. The pond is on the estate of the late W. C. Bryant, and our neighbor, T. Clapham, Esq., who, I am sure, is interested in trout culture. My husband, the late Joseph W. Moulton, introduced planting of oysters in Hempstead Harbor (our bay) in 1835-6. It is now a profitable business here, but he was laughed at for sending a sloop for oysters to plant. In 1837 he procured trout from Ronkonkoma Pond and from another source, but the experiment was a failure. I wish he had lived to see the success of Mr. Clapham. I hope this matter of the German carp will succeed. I am an old lady and do not expect to see a five-pounder."

"Nevertheless, as it was so obliging to you as I expected to see them on my table."

L. M. S. Moulton.

DUNKER'S FISHERY CALENDAR.—Each year Mr. W. Dunker, editor of the *Fischerei Zeitung*, Stettin, Germany, issues his calendar. The one for 1881 is now before us. It is a small volume for fish culturists, fishermen and fish dealers, and contains the usual almanac and calendar, blanks for the business accounts of sales, fishery laws of Prussia, Brunswick, Bavaria and Switzerland; a chart of the storm signals in use on the German coast; an account of the angling apparatus at the International Fishery Exhibition in 1880, illustrated with figures of hooks of bone and iron, gangs of hooks, spinning baits, floats, etc.; measurements of fish eggs, by Mr. von den Dorne; a German and Italian fish dictionary, giving the popular names of fishes in those languages, as well as their scientific names, and much other information concerning the subjects to which the book is devoted, all for the sum of one mark (twenty-four cents) in paper, or one and a half marks bound.

PROTECT SPAWNING LOBSTERS.—*South Norwalk, Conn.*—J. E. Jr., strikes the nail on the head when he says in his note, "Save spawning lobsters." The law now existing in some States, that lobsters under a certain length shall be returned to the water, does not cover the matter. When we want and must have if we are to have any lobsters, is a law to prohibit the sale of spawning lobsters, and if caught returned at once to the water. It is a mystery to me that the men engaged in this business cannot see that they are killing the goose that lays the golden egg. It does not take an expert to see that for every spawning lobster taken hundreds are destroyed, and as your correspondent from New Bedford says, "All the lobsters seem to run in the pots." For the benefit of those who are interested in this subject I will give my observations on the decrease of this most valuable sea food taken from Norwalk and Five Mile River. Five years ago with one pot well baited I could catch all the lobsters I wanted for use in my family. This year it would take a half dozen pots to do so. What is the cause of this? you will ask. The answer is simple: Potties in Norwalk and Five Mile River are making a living at lobster catching during the summer months, and all the spawning ones are sent to market with the other catch, and the result is they are growing very scarce, and if it continues a few years longer lobsters in our water will be a thing of the past, as it will shortly exterminate them. Let the *FOREST AND STREAM* which has worked so many reforms agitate this most important question, and let us all who are interested in this matter join hands in doing the same, until the spawning lobster is protected by law. Suppose we kill the spawning quail and the eggs, there would be no more quail, and it will be the same with lobsters if the spawning ones are all to be destroyed. I should be most happy to correspond with any parties who are in accord with me on this subject with the view of having the lobster protected.

FRANCIS BURRITT.

FISH FOR NEW YORK WATERS.—*Rochester, N. Y.*—The New York State Fish Commissioners desire to announce that they are now ready to receive orders for the brook trout, and California mountain trout from any parties who wish to procure them for the purpose of stocking public waters in this State. All applications must be addressed to the undersigned, giving a description of the waters, and where they are located.

Information will be given as to the suitability of the above fish for the waters desired to be stocked.

Orders will be received until March 1st, 1881.

SETH GREEN, Sup't. N. Y. State Fish Com., Rochester.

We are permitted to publish the following:

Mr. Seth Green.

Sir:—The trout you sent me two years ago last spring were put in Lake Harkness. There was no fish of any kind in the lake. I was up there this month and saw trout up the brook above the lake that would weigh one-half to three-quarters of a pound, they were on the spawning bed.

MYRON BUTLER.

That invalid wife, mother, sister or child can be made the picture of health with Hop Bitters.

Sea and River Fishing.

FISH IN SEASON IN DECEMBER.

FRESH WATER.

Pickering, *Esox lucius*.
Pike or Pickerel, *Esox lucius*.
Pike-perch (walleye), *Stizostedion vitreum*.
Esox lucius, *variegatus*, *S. vitreum*, etc.
Yellow Perch, *Perca flavescens*.
Sardines, *Clupea harengus*.

SALT WATER.

Blue Bass, *Morone chrysops*.
Rock Bass, *Ambloplites*. (Two species).
Striped Bass, *Morone saxatilis*.
Crabs, *Pinnax*.
Mackerel, *Scomber*.
Cods, *Gadus*.

Salmon, *Salmo gairdneri*.
Humpback, *Rosalia lucifera*.
White Perch, *Morone americana*.
Snell, *Gasterus mordax*.

FLY FISHING FOR BLACK BASS.

INDIANAPOLIS, Ind., Nov. 20.

Editor *Forest and Stream*:

A careful reading of the articles in your valuable paper on fly fishing induced me to try my luck with the fly. One afternoon in August last, equipped with one-ounce rod, silk line, six-foot leader and half-dozen flies of different patterns and of the most approved make, I sought the banks of White River, striking the stream at the Blue Banks, a noted resort for black bass, where I often had good success with bait and where I knew there were some monsters.

Putting my tackle together after what I considered to be the most approved method, not omitting to break one tip in

the operation, which had to be replaced with a spare one, I commenced whipping the stream in the shallow, swift water below the deep pool, using a silver doctor for the stretcher and a brown hackle for the dropper. At the second or third cast I hooked my first bass, and he looked himself, and I landed him in fine style. In less than an hour I caught several more, none over one pound in weight, the first taken being the largest of all, but I gained some lasting experience in taking the last one. I was standing on the bank of the stream and casting below me, when I saw a fish rise and miss the flies. Moving back from the bank and carefully walking down the stream until opposite the point where I had seen the fish I made cast after cast with no success, till at last, after a hurried, I was about to give up and try another place. Before doing so I thought I would take a look at the flies as they drifted past me and see if they really did resemble anything in the land of the living. Imagine my surprise as I saw the flies drifting down the stream, gradually sinking to the bottom, to see a bass following, with what appeared to be great curiosity, with body slightly bent and all the fins working. He deliberately took the hackle and came to the surface. Going up the stream I waded as far as possible into the deep pool under the Blue Banks and made a cast to a large boulder opposite me in quite deep water, allowing the flies to sink below the surface, and was awarded with a straightening of the line that indicated a fish. A slight turn of the wrist fastened the hook, and I discovered there was something lively at the other end of that line. Thinking to check him a little I pressed the line against the rod with the ball of the second finger of the right hand, but it did not work. My little boy, some twelve years old, says, "Father changed hands and put his finger in his mouth and said 'Ouch'!" But I guess he was excited and "does not now remember, if he ever knew" what took place. I know the line burned my finger like a hot iron, and momentarily gave the fish an advantage I was slow in recovering. My excitement was not lessened when he broke water and showed himself three times in succession high in the air. Having had no experience in casting, I did not know how much strain the tackle would bear. I had no fear of the line, but that single leader and the light rod seemed just then a bad combination. Determined to do my very best, putting my thumb on the reel I gave him nearly all the resistance of the rod. Up to this time he had had everything except the hook all his own way; but the resistance of that light rod was more than he had bargained for, and it soon checked his rapid career and changed his direction so that I was enabled to take him up a few feet. This trial of strength gave me some confidence in the rod and tackle. Keeping a steady strain upon the line and gaining more and more confidence, I found I could to a great extent control his motion, and at last made him circle around me time after time, his efforts becoming weaker, occasionally varied with a sudden rush and leap from the water.

Having no landing net I was somewhat puzzled how to get him. I had the fish all right, but knew I could not lift him from the water with that tackle. Fortunately the water shoaled gradually at the lower end of the pool over a sandy bottom free from obstacles, so in the end I grounded him fair and square with his head out of water on the shore, and wading up took him out by the gills. He proved to be a small mouthed black bass and weighed four and a half pounds.

Such was my fish experience with the fly. From that day until the advent of cold weather I used the fly and met with satisfactory results. I have caught, with a small mouthed black bass that would weigh four and a half pounds, but none larger. Although nearly every old fisherman in this locality has taken them weighing six pounds and more I have not yet had the good fortune to ever see one of that size. On several occasions during the latter part of the season I fished from a skiff with another party who was using live bait (minnows and craw fish) each time coming off the victor with my fly, and am perfectly satisfied with the superiority of the fly over all other kinds of bait for bass fishing in this locality during the summer and early fall months.

Now I would like to say a word for those lovers of the sport who cannot always select the time and place to try their skill, but do occasionally get a day off—I would advise all such when starting out for a day's sport among the bass to provide a box full of grasshoppers. If on reaching the fishing ground the bass will not rise to the fly, cut the body off from a silver doctor, insert the point of the hook in the head of same, and pass it through two-thirds of the body lengthwise, and bring the point out on the other side; slide the grasshopper well up on the hook, cast and allow to sink; nearly all kinds of fresh water fish will take it readily, including the cat-fish of the different species. If the disciple does not desire to mutilate one of his choice collection of flies he can easily make a minute the body, and all the structure as described. Old fisherman will tell you the haunts of black bass will not be troubled with the smaller tribe, and if they have not tried this bait before will be astonished with the number and size of the take.

GRINGO.

FISH SLAUGHTER IN CANADA.

OTTAWA, Dec. 17, 1880.

Editor *Forest and Stream*:

Recently I had occasion to correct some misrepresentations concerning the salmon fishing along the Canadian fishery laws published in the *Forest and Stream* by an English sportsman named Mr. Eardly-Wilmut B. Holt. I have now to refer to misinformation circulated by an experienced American angler well known to your readers, Mr. Geo. Dawson, of the *Albany Evening Journal*. The distinction made between Mr. Holt's and Mr. Dawson's publications rests on the fact, that the former's assertions profess to be based on actual observation, and the statements of the latter seem to be founded on hearsay.

FOREST AND STREAM of 25th ult., under the heading of "Killing for Count," Mr. Dawson says: "Last year three titled Bunkies from England killed 600 salmon on the Cascapedia. Most of these were taken thirty or forty miles from any habitation where they could be utilized. The result was that most of them had to be buried as offal. But this disgraceful fact did not accompany the published score which was the best catch on record, and as proof of the great skill of the fellows who perpetrated the slaughter."

The angling party on the Grand Cascapedia last year consisted of the Hon. Chas. Ellis, Mr. Iverson and Captain Percy. These gentlemen reeled the stream for \$600. Their score was very high, but nothing improper was supposed to be connected with this extraordinary catch. If any of the fish caught by them were wontonally wasted, as alleged, it would be an infraction of the fishery laws, rendering them liable to

severe penalties and summary expulsion. It is the business of the local Fishery Overseer to enforce these consequences, for which purposes among others, he is invested with magisterial authority. Mr. Dawson's article was therefore promptly referred to him with a request for explanation. Mr. Oversee Dimock is the chief fishery officer at Cascapedia, and during a series of years has proved attentive and trustworthy. In answer to such reference he states positively that not one of these fish was spoiled or wasted, but that the whole catch (apart from daily consumption) was given away to settlers on the river, and to employees of the party, there being thirty men, each of whom received one fish. About three-fourths of the fish he adds, were taken in the lower pools. Mr. Dimock's report is corroborated by the affidavits of several persons who are certified to us as credible witnesses, being themselves engaged on the river at the time, and the same men who cured, or carried and delivered the salmon.

The accomplished author of "Pleasures of Angling" will no doubt be gratified to learn that in this particular at least he has been misinformed. "Killing for Count" being in itself sufficiently objectionable from a true sportsman's point of view even when qualified by the necessary care and unusual, but commendable, liberality which I am assured were manifested in the present instance. Yours truly,

W. F. WITCNER,
Commissioner of Fisheries, Canada.

THE GREENBRIAR.

WASHINGTON, D. C., Dec. 1880.

The Greenbrier River in West Virginia was stocked with bass, as you know, several years ago, and in September, 1879, I was the first to sample the stream with a fly, and was rewarded by several good baskets.

This fall I passed through Roncovec on my way to the woods, and I found the people all posted as to bass. The fishing was excellent this year. One man caught 500 during the season. The largest went to 43 lbs. weight. The superintendent of our mill having informed me that it was "no use to go to the river with a fly, as the fish were all gone," I just walked away with certain leaders and flies I had sent down to him by request, that he might learn to fish properly. To correct his views I rigged up my trout rod, and from a pool just below the mill I took two at once of 23 lbs. weight. The fish having fortunately taken the dropper, a great many very large bass were taken lower down the Greenbrier, and at Richmond's Falls on New River where I heard of one 54 lbs.

I do not think the bass will be as numerous next season. The stream having been recently stocked, of course contained a lot of undisturbed minnows, chubs, etc. Now since the bass got large enough to catch—and they will jump at a fly when only two inches long—the small fish have been devoured until there is not a minnow to be seen high or low, and the bass have worked up and down in search of pastures new. Of course there will be plenty of bass in the stream, but only as many as the normal supply of food will sustain. There will soon appear as prolific a season for the angler as was this 1880. I spent several weeks on my trip living on venison, etc., etc., including a variety from coon to turkey. Among other trophies of the chase was an eagle 6 ft. 9 across the wings the head of which I have had set up by Kridler. I did not look after any panther as there was no snow. C. CLAY.

"A WATER-GLASS."

IN looking over "Atlantic Islands," a very pleasant book by Mr. S. G. W. Benjamin, I find the following account of an instrument used by the inhabitants of the Bahamas in gathering sponges: "The sponges (says the author) are two or three fathoms deep in the water. The position of the sponge is ascertained by means of a water-glass, which is a simple oblong box a foot square, open at the upper end, and containing a pane of glass at the other; on holding this perpendicularly over the water one can see everything through it as clearly as in an aquarium—fish, sponges, coral or shells."

We are not told the length of the box, or the kind of glass used, or the depth of the glass end in the water; but the present-day diver's glass, which is made of glass, is so handy and easily wielded, and not costly in construction. Why has not some angler, or enterprising fish culturist, or naturalist introduced this implement among us? An instrument which would enable us to watch fish beneath the waters—to see all their movements—how they spend their idle time—in a word, lay open to us their whole existence, would be a great boon to the naturalist. But talking one day with an angler, a disciple of old Frank about such an implement, "Why," he said, "that would spoil all our fun. Now when I throw my minnow in the water, I forthwith begin to imagine there are a half-dozen or more huge bass eyeing my bait, and each meditating a deadly attack upon him. And I keep on imagining this, expecting every moment to see the cork disappear, and the very loveliness of this expectancy is what stirs a thousand pleasant musings in my head and makes angling to me so delectable. But with this device no more fairy fancies; we should see at once that there were no fish, and we should have no brilliant hopes." "But then," said I, "we could go where we could find and catch them." "But that," rejoined my friend, "would not be fair to the fish, and I'm in favor of the fish having a fair chance, and I love my dreams."

RANGE OF BLACK BASS AND CATFISH.—*Cleveland, O.*—Dr. Garlick says in *FOREST AND STREAM* that in company with Judge Potter, of Toledo, he has fished the waters of the Salt State's Marietta rapids and their surrounding for many years, and neither of them ever captured a black bass in that locality; nevertheless I have seen at the "Sailor's Encampment" on this river, twenty miles below the rapids, many black bass taken. In 1863 H. C. Gaylord, of this city, while fishing for trout in Goulie's Bay, north shore of Lake Superior, caught two black bass with the fly. They were well grown fish, weighing 24 lbs. each. I saw numbers of this fish at the Portage, Point Keweenaw, in 1859, and persons were commonly seen relying upon information that this fish is found in the region of Duluth, at the head of Lake Superior, and also in the vicinity of Ontonagon on the south shore of this lake.

I am yet in search of the most northern range of our catfish. Perhaps the waters of the Mississippi will be found to carry this fish furthest in that direction. In case it is found in waters north of the divide, that flow into the Arctic seas, please let us hear from the captor, and also have a description of the fish and its habits in that locality.

DR. E. STERLING.

MORTALITY OF FISH IN TAMPA BAY.—Our correspondent, "Al Fresco," in writing to us from Jacksonville, Fla., encloses a slip headed "The Epithichthyotic," from the *Sunland Tribune* of Tampa, which says:

Last week we noted the fact that a great many fish of all varieties were dying in Tampa Bay. At first it seemed to affect the common bass fish, though such and more in the water near the surface were not exempt. On a tolerably diligent inquiry we can learn of no local cause for it. It seems, however, that some time back the poisonous water which appeared on the coast south of here in 1878, had made its reappearance down the coast and it is possible that the almost continuous southern winds which have prevailed for some time have brought up the coast and filled our bay with the poisonous water. This idea is confirmed by the fact that fish in the western half of the bay were the first and worst affected by the cause, whatever that may be.

TENNESSEE—Nashville.—The largest fish ever seen in this market was exhibited by Sulzbacher last week; he called it "Warsaw," but in reality it was "Jew fish," *Promisorus gusa*, and weighed 225 pounds. J. H. D.

Game Bag and Gun.

GAME IN SEASON IN DECEMBER.

MOOSE, *Alces americanus*. Caribou, *Rangifer carolinensis*. Elk or wapiti, *Cervus canadensis*. Red or Virginia deer, *C. virginianus*. Squirrels—red, black and gray. Hares—brown and gray. "Day birds" generally, including various species of plover, sandpiper, snipe, curlew, gallinule, surf Scoters, phalaropes, avocets, etc., coming under the group *Lamcole*, or shore birds. Many States permit prairie fowl (gallinule) shooting after Aug. 15.

The following articles have been reprinted together in pamphlet form from our issues of September 23, September 30, October 7, and December 9, and will be furnished to the readers of this paper, or of any other paper for that matter, upon application:

- "The 'Dittmar Sporting Powder.'"
- "Evading Detonation."
- "The Detonation of 'Dittmar Sporting Powder.'"
- "The Dittmars' Abacabadra."

TO THE FARMERS OF LONG ISLAND.

GENTLEMEN:—If you are aware that it is the intention of the different clubs and associations of Long Island for the Protection of Fish, Game and Song Birds, to take strenuous measures to have the laws now in force revised and amended. These alterations will be, in my opinion, of great importance to every farmer on this island, especially those portions of the laws relating to the insectivorous birds.

Their indiscriminate slaughter, together with the robbing of their nests, has reduced their number that insect life is becoming so serious a plague to the farmer that you have to contend against. Many of you that I have had the pleasure of meeting during my rambles over the island, collecting and studying the insects injurious to vegetation, have seriously complained to me of the ravages which your crops sustain from the attacks of numerous tribes of insects, which oftentimes spread universal havoc. Your fruit trees are scourged by various curculios (snout beetles or weevils) and by *Aleyra*, a family of clear-winged moths. Your wheat, rye, oats, barley, and in fact every grain grown for comfort or profit all have their peculiar species of insects which destroy them.

You who have woodlands must have noticed of late years that many of your forest trees have sickened and died. In the Cemetery of the Evergreens, at Cypress Hills and in Prospect Park, and in other parts of the island, many of the finest trees have died out, destroyed by insects. On the hickory and walnut trees the Tiger Cerambyx (*Monobactenus tyronius*, Germ.) deposits its eggs. The worm soon hatches and eats into the tree, making a burrow two or three feet in length, which in time kills the tree. It is only in the spring, when the tree puts forth weak, sickly leaves, that the extent of the ravage is shown, as till then it usually appears sound and healthy. There are many other insects which I could name that are injurious to your forest trees, but this example will suffice. Within a few years a new insect has made its appearance and already developed into a pest almost as serious as the curculio. It is the *Pieris rapae*, generally known as the cabbage worm—in fact, the list of your insect plagues is endless.

Now, gentlemen, there is cause for the great increase of these swarms of insects of late years. In my opinion, it is owing in a very great measure to the wholesale destruction of our insectivorous birds, which were formerly abundant everywhere.

If you visit the woods at the proper season you will then see that beautiful bird, the golden-crowned woodpecker, a bird every farmer is familiar with as the "Highhold." Watch him and others of his kindred; see him flitting from tree to tree, busily engaged from early morn till the sun sinks below the horizon, tapping every part of the tree and making the woods resound with the blows from his sharp and powerful beak. He is searching for the worm that is slowly but surely eating away its very life, and his instinct enables him to detect it when man would fail to do so. See what value attaches to this insect-eating bird, and you will not be a disgrace that it should be so ruthlessly slaughtered?

From a rough calculation, it is estimated that over one hundred thousand of these birds are destroyed every year. I counted 120 gunners in a small belt of timber near Flat-bush this fall, in the course of a morning's ramble, all intent in their murderous work. Then there are the thrushes and a large number of insectivorous birds too numerous to mention in this paper. Last spring I examined several wood-throats (*Turdus melodia*) given to me, and in the stomachs of four I found over one hundred and twenty specimens and parts of specimens which I could identify, representing sixteen different species of insect known to be injurious to vegetation. It is stated by Bingley that a pair of house wrens have been observed to leave their nests and return with insects from forty to sixty times an hour, and in one particular hour the pair carried food no fewer than seventy-four times, and in this business they were engaged during the greatest part of the day. Allowing twelve hours to be thus occupied,

a single pair of these birds would destroy at least six hundred insects a day. Swallows and martins live entirely on insects, and as they are always on the wing they rid the atmosphere of noxious pests that, but for their friendly aid, would be unendurable to man. Were it not for these insectivorous birds the earth would be overrun by insect life. By those who have studied this subject it is admitted that the agriculturist is deeply indebted to these birds.

The large number of idlers who visit your lands and woods, armed with guns, shooting and destroying everything that comes in their way, even your domestic fowl when opportunity offers, must be repressed in some way, or your labor on your crops will soon be in vain. The remedy in a great measure rests in your hands, and your co-operation is most earnestly solicited to the proposed amendments and additions to the laws, that they may pass the Legislature, as they are of vital interest to you all.

The laws which it is intended to present are briefly as follows: After some slight alterations and additions to the laws now in force respecting the shooting of game birds, it is proposed that any person detected killing eagles, night-hawks, martins, whip-poor-wills, swallows, woodpeckers, meadow larks, thrushes, or any of our song or insectivorous birds, shall be fined \$10 for the first offense, and for the second offense imprisoned for not less than twenty days nor more than three months in the County Jail, with forfeiture of the gun.

For the destruction and robbing nests of wild birds, and for trapping or feeding birds on prepared grain or other poisoned ingredients for the purpose of destruction, a fine of \$10 is proposed for the first offense, and \$50 with imprisonment for not less than three or more than six months for the second.

We also propose to have game protectors for our game and song birds and for fish, one for each county. Also to have a license law, to compel every person who shoots to take out a license, to be issued by proper authority. (Farmers and their families excluded.)

Gentlemen, if these laws can be passed, and I am certain they can with your assistance, they will strike at the very root of the evil. I hope that this article will receive your serious attention, and any suggestions relative to the proposed additions and alterations to the present laws would be very acceptable and would materially assist us in arriving at some definite conclusion, that the laws presented may be such as you approve, and that you will earnestly use your influence with your representatives in the State Legislature to have them passed.

Any communication on this subject can be sent to the Editor of the FOREST AND STREAM, No. 39 Park Row, New York. NICHOLAS PIKE, President of the Society for the Protection of Song and Insectivorous Birds of Long Island.

"THE TRAPPER'S LAST SHOT."

HE was probably christened James, but is always Jim now, and along with the greater part of his Christian name he has almost entirely lost his surname. If he had been a few shades lighter he might have been "Colored Jim," but black being the absorption of all color this name would not fit him. So he is known, wherever known at all, as "Nigger Jim." He is an expert trapper and fisherman, but after singular and unexplained success as a poor laws ward for years he lugged about carried in his boat an ancient flint-lock Queen's arm, so deadly in its action that it would kill pike with only a charge of powder, so Jim said, yet he rarely brought home any spoils of field or flood but such as were gained by trap or hook.

Once, however, he made a very telling shot. It was on an October morning, and he was paddling his light trapping skiff up the channel of Womakakutauk as silently as any Indian could, when as he rounded a bend he saw through the tall stalks of the wild rice at least a dozen ducks sitting among the lily pads in the edge of the channel, not six rods from him. Here was his long-sought opportunity, and no sooner did he deem them than a backward stroke of his paddle stopped the headway of the craft just before she poked her sharp nose in sight of the unsuspecting fowl. Then he laid the paddle in the boat without the slightest noise, and as silently lifted from her resting-place his old gun, whose age and readiness at the moment consisted of all the powder in her owner's possession and a handful of R.F. shot, both wadded with a half-pound or so of wasp nest. He cautiously thrust her muzzle through the rice stalks, cocked her without a tail-tale click of the ponderous lock, set the breech-plate firmly against his shoulder, laid his cheek to the stock and took such long and deliberate aim that a spider, setting his snare among the rushes, made fast an end of his web to the rusty barrel before Jim slanting both eyes, set his teeth, and with a sturdy pull unlatched. There was a dazzling flash in the pot and a kettle full of lead and caught fire, and then the noble weapon belched forth a horizontal column of flame and smoke, killed Jim and his skiff half the boat's length astern, and gave a roar that went hellowing down the creek, across the lake, and was tossed back and forth from Split Rock Mountain to Shellhouse for five minutes before it lost its voice.

When Jim got his eyes open and his wits gathered, he peered through the edifying smoke and saw—not a feather raised nor a duck stirred—standing as he last, but some riding unconcernedly with their heads knocked off and some keel up in a quarter acre of fine splinters. Then uprose two Boston men from among the rushes, and the fire and smoke and uproar and vicious recoil of Jim's gun were as nothing to the vials of wrath which they poured out upon his curly devoted head. Never was such paddling done on these waters as Jim did till he put half a mile of Womakakutauk's channel, seething with his rapid strokes, between himself and the scene of bloodshed slaughter. Then he shoved his boat into the rushes and skulked ashore.

Next day he offered his gun for sale, giving as a reason that she burst so much powder no poor man could afford to keep her. He effected a sale at \$1.50, and has done no duck shooting since. He says, with emphatic shakes of the head, "Any man that 'll try to fool ducks with them cursed wooden images, 'll steal sheep! Yes, sir, 'course he will!"

KENTUCKY, Louisville, November 28. The sport of duck-shooting is now in full blast. Six-mile Island is a favorite resort for gunners. We use a skiff 4 ft. at top, 20 in. bottom and 18 ft. long. We sit on one side of the craft, so that the other side tilts up and conceals us from view; and then we paddle down, and nine times in ten manage to get within thirty feet of the birds. I have been hunting for great years and have found this place most successful. M. L.

ATMOSPHERIC EFFECTS UPON SHOOTING.

LE ROY, Dec. 17.

I HAVE been much interested in reading the articles which I have appeared lately concerning guns, their peculiarities and how to load them to secure the best results. No doubt many brother sportsmen have noticed, as I have, that a certain proportioned load at one time would produce good results, and at another, under apparently similar circumstances, the results would be quite unsatisfactory. Sometimes a load would be very killing, hitting hard and clean, and at another time the same load would only wing the birds or miss them altogether, even with equal care in loading it, settling powder and shot evenly and having the wads lie at right angles to the axis of the shell, and holding the gun on the birds as perfectly as possible.

With regard to this matter I received an explanation once from an aged gentleman who had spent most of the years of his life in Turkey, about Tokat, Smyrna and Constantinople, and who had always been a great lover of shooting, spending a portion of each year in trips about the country. He said it was always his practice to load a few shells with what he thought the proper amount of powder and shot, and then target them, observing the pattern and penetration before going into the field. If it was a damp day and the pattern was not good he would have a larger proportion of powder to shot, and if a dry day *vice versa*.

His reason for so doing was this: on a damp day he could burn more powder to get the same pattern and penetration without recoil than he could on a dry day. He said he learned this from his servant, who was an old and experienced and successful hunter, and who always practiced this plan. He gave an illustration. Once he was out shooting red-legged partridges, and with his first shot dropped the bird clean, with the second he only winged the bird, and at they are great runners he had some difficulty in capturing it. With the third shot he missed altogether. He noticed that the atmosphere was changing from dry to damp, so he changed his load accordingly. With the next shot he killed clean; with the next he only winged, and with the next he missed. He changed again with better results. The third time he repeated his former experience. He trained his sons to practice the same care, and they are good shots. His gentleman explained this matter to many English hunters, who he accompanied, but they only laughed and persisted in bringing their ammunition fixed, and consequently were uncertain in their shooting.

Now, whether this rule is only applicable to the climate in question or not I cannot determine, but certainly his experience is worth something, and to bring about a better understanding of this matter I give you these facts. I am sure it would be of interest to the fraternity if some one would experiment carefully with this method and give us his opinion. May not the principle involved, if I may term it such, account for some of our off days? I have not had time to test this matter myself, because when I go shooting it is only for a few hours, and wish to receive as much benefit and make as heavy a bag as are to be obtained in a gentlemanly and sportsman-like manner.

Two things have caused the FOREST AND STREAM to be a source of pleasure to me, beside the accounts of sport, viz., the Dittmar Powder Company and the Dittmar's Sporting Powder advertisement to expunge from its sports literature the frequent use of oaths and reference to the bottle. A gentleman sportsman and genuine lover of nature has no need of these latter and too common accompaniments, and their occurrence in accounts of good sport is decidedly distasteful to him.

Many shooters in this town and vicinity make it a practice of shooting birds and hares on Sunday as well as other days. OATKA.

OUR PHILADELPHIA LETTER.

I AM pleased to be able to tell you that Mr. Spencer I. Trotter, of Philadelphia, who has been engaged for two years by the Academy of Sciences to re-classify and arrange the immense collection of birds in possession of this institution, has promised to furnish the writer ornithological notes, etc., to incorporate in my weekly letter to you; and your readers may expect very interesting matter, as we know of no young man whose knowledge on the subject is so varied and who understands the study with more thoroughness.

Mr. T. writes me this morning referring to the query, "Do snakes swallow their young?" the following: "Doubts have been expressed as to whether snakes swallow their young on the approach of danger, and there has been at various times and places some little discussion on the subject. Last summer, while tramping among the Berkshire Hills in Massachusetts, I came upon a common garter snake (*Eutania striata*) which was making all haste from the path. As I think now I might have left the poor harmless reptile to enjoy life, but because some nervous females were near by who declared they were never so frightened in all their lives, I cut the snake in two with my heel, just about the middle, when out popped quite a lot of little squirmers, which made lively time to get out of the way. The old lady was probably basking in the sun, with her family around her, when, hearing us approach, she gulped down the whole number. I only offer this as a fact which came under my own eyes."

In conversation with some old sportsmen who have long since given up the gun, but who still love to relate of their past experiences, we learned that General Cadwalader, of Philadelphia, who owned a farm and ducking punt on the Gunpowder or Bush series, some years ago made the attempt to "transplant" the California quail on his property and the surrounding country. He brought a large number of the birds, we understand, perished the succeeding winter, as it proved very severe, and many were found frozen to death. There is a record, however (Lewis, in his "American Sportsman," speaks of it), of a curious bird having been shot from a covey of the common quail, which was supposed to have been a hybrid or cross of the California quail, and our own Bob White, and more of the same were reported in the covey. This bird, we think, is now in the Philadelphia Academy of Sciences. Would it not be well, I think, for editors, to make a special request in your columns to sportsmen of country residence to make a report to you of any old or new birds that come under their notice? Many of this class who are not familiar with the work done by some of our game protective societies in liberating prairie chickens and migratory quail might thus furnish valuable information pointing to the success of the several enterprises.

Last week the Germantown Hares and Hounds Club had a

THE LEONBERG DOG IN NEWFOUNDLAND.

SOME readers of *FOREST AND STREAM*, will remember that I gave an account in its columns of the introduction of the celebrated Leonberg dog into this island. The attempt to introduce the new breed was made under the most favorable circumstances. Three puppies were selected by Count Esseg, of Leonberg, Wurtemberg, Germany, the breeder of the new race, for the express purpose of trying the effect of the Newfoundland climate and a further infusion of Newfoundland blood. The puppies were ten weeks old when brought here by a friend of mine, and in due time grew up into magnificent animals, distinguished for their immense size, beauty of form gentleness and sagacity. The Leonberg dog is slow in coming to maturity, and the Count did not wish them to breed until their third year, when they are full grown. Unfortunately we lost the male by a dose of strychnine which he accidentally swallowed, but Count Esseg, when he heard of our misfortune, replaced him by a still finer specimen. These circumstances and other mishaps retarded the propagation of the breed here, but it is now fairly established, and will multiply rapidly, as we have about a dozen young animals in addition to the three imported. Some of the young are grown up and breeding. So far all are the result of a cross between the Leonberg and Newfoundland dog, and the progeny appears to be a decided improvement on the original stock, the increased dash of Newfoundland blood improving the appearance and good qualities of the offspring. The climate evidently agrees with the breed, and the variety thus produced promises to be of great value. A litter is shortly expected by Diana, one of the female dogs originally imported, now breeding for the first time, though nearly four years old. She is a beautiful creature, twenty-eight inches high at the shoulder, five feet in length, weighs 107 lbs. and is exceedingly gentle and intelligent. She is by far the handsomest dog in St. John's. Her owner says he would not part with her for \$200. We expect her progeny will be very superior. The owner of one of the other crosses, now three years old, sold \$80 for him. The puppies are eagerly sought after, and when six weeks old sell for \$20 to \$30. The price is rising as their value is recognized. Arrangements are made to have a good number of litters during the next two years of the pure Leonberg breed in order to keep up the purity of the stock and to compare the result with the crossing above referred to.

It may be well to state that the Leonberg dog was reared since 1846 by Count Esseg, and that it was the result of a cross between the best of the German and the best of the St. Bernard Mountain, which latter has been improved by the great wolf dog from the Pyrenees, where the first Bernardine dog originated. The Leonbergs are the largest race of long-haired dogs who unite sagacity with size and beauty. They have carried off the highest prizes at the leading dog shows of the world. They are not subject to madness—no case having yet occurred among them. They often reach a height of from 30 to 40 inches, and weigh considerably over 100 lbs. Since the foregoing was written I have learned that Diana has presented her owner with nine puppies, of which six are preserved, and that Gumo is also the mother of six, so that our Leonberg dog colony now numbers twenty-seven in all. In the course of a few years, if due care is observed in preserving the breed pure, this new and superior race will have multiplied considerably, and will ultimately establish here an exceedingly valuable breed of dogs, which will supersede the miserable mongrel tribe into which the Newfoundland dog has here degenerated. M. HANVET.

St. John's, Newfoundland.

HOW TO TRAIN COLLIES.

DECEMBER 20.

Editor *Forest and Stream*:

In reading the various sporting journals of the day I frequently see articles upon the subject of educating and training setters, pointers and sporting dogs generally, but I cannot remember ever seeing anything about the education and training of my favorite dog, their non-sporting brother the Scotch collie, who, in his sphere, is as useful and valuable as any member of the canine race. And now, since the success of the collie trials held under the auspices of the Pennsylvania State Agricultural Society, at Philadelphia, in the latter part of September, and as it is more than likely that they will be repeated another year, and that other agricultural societies will follow suit, and inaugurate them as one of the greatest of their shows, I think it will not be amiss to give you my ideas in regard to their education and training.

I have owned collies all my life—good, useful and well-trained dogs—and in my walks and drives they are my constant companions. Master Collie is a mischievous and fun-loving rascal, and even when well trained this love of mischief will show itself. There is now curled up at my feet one of the handsomest collies in America. She has been shown at several bench shows and has always been placed, and besides is a first-rate worker on stock. She is always under my buggy when I am driving, "except" sometimes I allow two others to follow for a frolic and exercise. Now, here the "except" comes in. If by chance this crew spy a cur on the road the mother collie will be off like a shot; out she goes from under the buggy, passing between the front wheels and horse, throws her head back and gives a sharp, quick bark or two, as much as to say, "Come on, PUNCH and JURY; here's fun for us!" and then she will go like a thunderbolt, but she cannot be overhauled and nubbled about in the dust. Well, it's all over in a jiffy and they come trotting back, I suppose laughing to themselves. I point my finger at her and say, "Aren't you ashamed of yourself?" Her head goes down, tail between her legs, she snarls her chops, whines, "Yes, but it was so much fun I could not resist the temptation; I'll not do so again—until next time," and next time the same thing is repeated.

For the first six months or so the puppy is allowed to do pretty much as he pleases, so long as he keeps his long nose out of the cabbage-pot, doesn't suck the eggs or worry the pets, for Master Collie is a busy-body and is nearly always in some kind of devilry; but even at an earlier age than this the collie may sometimes be seen gathering the chickens in a corner of the lot and manoeuvring them as his ma does the sheep.

As a general rule we commence their education about the tenth month of the puppy's age; but we sometimes see them younger than this working stock like old stagers. I have one in my eye now that at five months old would go to the pasture field, containing about sixty acres, drive out the cows and bring them home, a distance of over one mile. At six months old she was working sheep and obeying every sign and motion of her master.

The first thing I do is to make the dog love me. I treat him kindly, never kick nor strike him and never deceive him. I talk to him and let him know he knows every word I say. There is a great deal to assure you in this "love me." When he loves me and understands me I take him into a room and there teach him to follow close to heel, to stop at a whistle, to lie down when told, to go forward by motion of hand and to either right or left. I always stop my dogs with a whistle, to attract their attention before giving an order by mouth or hand.

When I consider my youngster house-broken, that is, when he obeys my motions and whistle, I take him with sheep—confined in a lane—and allow him to drive them with me, and by motions I keep him moving from one side of the lane to the other—when we are at the end of the lane I say "Around them!" motioning the way up the side and go with him and show him. When round them I stop him with a whistle, make him lie down, and leave him; I then go in front of the sheep and tell him, "Bring them along." If he comes too close to the sheep, I stop him with a whistle, and say "Keep wider"—or "Slower." These lessons I repeat until I consider him nearly perfect in driving my dog down the lane, then commence to teach him to go from where I stand at one end of the lane to the other and bring the sheep to me, this I do by motioning the way and saying "Far away!" and if he does not go I go with him and show him what to do. When behind the sheep I make him lie down, and I go to the spot where I first gave the order and from there whistle him to bring them along. When he does this work to my satisfaction I then allow him to the fields to drive the sheep from pasture, and here I repeat all my former lessons to him; I teach him to jump back and forth over a fence, and to bark when told, but never to bite; and when he attempts to use his teeth I punish him. Now as to punishment, as I said at first, I never kick nor strike—I catch the collie around his nose and give him a shake or light tap on the ear with my hand, a cross word will cover him at once.

There is one thing I never like to do, that is to commence working my puppy on cattle. As a general rule it will not do, as the dog becomes too severe and it gives trouble to, afterward break him of this habit. I commence first on sheep, and when he will work them carefully I can then allow him to drive other stock.

Now one other point and I am through. The old adage, "too many cooks spoil the broth," applies to Master Collie. If you wish your dog thoroughly trained, only one must work him, and that one I insist must be patient and teach him quietly and gently. If you wish him spoiled and made worthless allow the whole family to work him and you will succeed in this admirably. COLLIE.

THE SCARCITY OF REALLY GOOD HUNTING DOGS.

TO the casual observer, who reads in the weekly edition of your valuable paper the record of breeding, births and deaths of the canine family, it looks as if the country would soon be overrun with this breed of dogs. This mania for breeding has been going on for years; still, to secure a really fine field dog is no easy task, even though what would be considered by some an extravagant price is offered. To others besides myself these questions may have presented themselves. What becomes of the thousands bred? Why is it so hard to get a really first-class field dog? My answer to the first is that of the thousands bred but few arrive at maturity. The lills to which the canine race are subject are legion. In the first place, I believe I have been practised naturally impairs the physical stamina of those bred; they easily succumb to nearly any ordinary disease. Those that live have not, in my estimation, justified the great praise that has been bestowed upon the imported breeds as field dogs. To be sure now and then an extra fine one is brought out at a field trial, but these cases are the exception rather than the rule. By many Gladstone has been looked upon as the best setter in America. The sporting papers have been full of his praise, while Joe Jr., who is a cross one native stock, has beat him at all trials, but is seldom mentioned. The reason may be that one is a Llewellyn, the other not. To produce a really first-class field dog does not in my estimation depend so much on whether he is a Llewellyn, Laverack or cross of either or native stock; for whatever breed, I believe the sire and dam must be from strong, healthy stock, with intelligence and unsurpassed hunting qualities.

Some consider speed the great requisite, while others consider a fine nose far superior to excessive speed of the two. Give me fair speed with fine nose, in place of excessive speed and poor nose; the former will find more birds and give more pleasure in a day's shooting than the latter. But the standard for speed has, by the field trial rules, been set so high that what any sportsman would call a really first-class dog to get game over stands but little chance to win, consequently breeders have been trying to produce as fast dogs as possible, ignoring some of the qualities which, to an ardent sportsman, are of more value. Having produced the whelps from which it is intended fine field dogs shall be made is but a drop in the bucket toward producing a fine field worker. The raising of these whelps—the time, trouble and expense before they arrive at an age fit to decide if they have good natural field qualities—is considerable. Possibly one half of the setter's die; if so, usually we are apt to think the best if the others do not prove good. But if two out of six make nearly first-class dogs as we settled, as by experience I have learned that, breed as you will, all are not equally good, while some are worthless. So, out of a litter of six, two really good ones are secured to put in the hands of a breaker. Up to this time, unless one has all the necessary conveniences for raising, they have undoubtedly been a nuisance; they have now gone into the hands of a reliable breaker, with the fond hope that ere long they will be returned so perfectly trained that they may be your shooting companions for years. Alas! how often are they disappointed, as by experience I have learned that, breed as you will, all are not equally good, while some are worthless. So, out of a litter of six, two really good ones are secured to put in the hands of a breaker. 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such strain of pointers as he speaks of, and so inflated have I been with the memory of the countless days I enjoyed and loved these priceless canine companions that I determined to ransack the country for the material to reproduce them or a like strain. After four years I have had most gratifying results, and I am confident that in the near future, if not at the present date, I shall be able to show in the field a dog, or dogs, answering his description—a strain of bold, shining liver and white pointers, with grand heads, long muzzles, hair short as any modern breed, but coarse and hardier to the touch and harsher to the eye, capable of any amount of endurance, fatigue and privation, and able and willing to hunt anywhere and everywhere, in any climate, day in and day out, for months in succession; and their premier quality is an extra fine nose and good disposition. These last are the pinnacles on which I pin my faith.

Flabush, L. I., Dec. 21.

BLACK NED.

TRAINING FOX HOUND PUPPIES.

I SELECT the most promising youngsters, and when they are five or six months old tie a cord to a fox's belt, and drag it for a hundred yards over a smooth meadow, while the morning dew is yet on the grass. I then select the slowest and steadiest bound in the pack and let him run around the course. The puppies will soon learn to follow in splendid style, and I exercise them in this way until they are eight or ten months old. Thus they become accustomed to the scent of the fox from their very infancy. I now mount my horse and drag the belt for a mile or more, increasing the distance as they grow older riding well up among them and urging them on with whip and voice. When they are about a year old I secure a living fox and release him in some smooth broad meadow, giving him only a few yards the start, so that the chase may be a short one and that they may be sure to catch him. This first taste of blood has a marvelous effect in the education of the youngster and will never be forgotten in after life. I repeat this as often as a fox can be had for the purpose giving Reynard more start as the puppies grow older in order to prolong the chase. I accustom them to the horn from an early age, and they soon learn its meaning from the steady old dog that is always with them. I never permit them to chase anything but the fox, and very soon they will not notice a hare even though she jumps up in their path. I now take them with me when I go out with the pack for a regular chase, but keep them in hand and coupled until the fox is very hardly pressed, and then cast them off so that they may be at the death, and yet not fatigued by a long run. A dog is not fully matured until two years of age, and until that time should not be permitted to hunt with the pack.

Select only the fleetest and steadiest animals to breed from, and preserve only the most perfect and promising youngsters. Let the diet of the puppies after they are six months of age consist principally of meat, as its tendency is to build up muscle and bone, not fat. Give only enough of milk and vegetables to keep them in health. Never allow them at any time to lay on more than the fat of the season.

Give them always plenty of exercise, kind treatment and free access to pure, cold water. Now there may be more scientific methods of training youngsters than this, but under this system Hal and I have educated packs before whom a fox can seldom live three hours above ground, and many have died in thirty minutes.

Bridgeport, W. Va.

NIL YONKIS.

PITTSBURGH DOG SHOW.

THE following arrangements have been made with express companies for the conveying of dogs to and from the show:

To E. Garzo, President Western Penna. Poultry Society and Bench Show, Pittsburgh:

We the undersigned, agents for the several Express Companies represented by us, do agree to return all fowls and dogs (that have paid full rates to the Western Pennsylvania Poultry Society, and brought by our companies) free, to the points where originally shipped from.

D. Zimmerman, Agent B. & O. Express; C. S. Sedgwick, Agent Adams Express Co.; T. J. Hudson, Acting Supt. Union Express.

Mr. Lincoln writes us, that all the leading railroad companies have been written to, asking them to convey dogs free of charge, to and from Pittsburgh, when they are accompanied by their owners or care takers.

SPECIAL PRIZE LIST.

A. Parker Brothers, of 79 Chambers Street, New York, offer a double breech-loading gun, valued at \$150.00 for the best setter dog or bitch of any strain.

B. J. J. Schellenburg, of New Brighton, Pa., offer a first-class velvetten or corduroy hunting suit, made to measure, valued at \$50.00, not to be competed for by the donor, for the second best setter dog or bitch of any strain.

C. For the Irish setter dog, steel engraving of Biddy and Erin, value \$10.00.

D. For the best pointer dog, steel engraving, framed, of Keswick and Jessamine, value \$10.00.

E. For the best Gordon setter dog, Laffin & Rand's Powder, value \$10.00.

F. For the best English setter dog, Laffin & Rand's Powder, \$15.00.

G. The Bear Creek Refining Co., Limited, offer a barrel of water white oil, for the largest collection of non-sporting dogs, exhibited by one person.

Separate entries must be made for all specials, for which ten per cent. of the value of the prize will be charged.

CHAS. LINCOLN,

Superintendent.

Address: Office, Old City Hall, Lock Box 393, Pittsburgh, Pa.

In addition to the above, donations have been received to the amount of \$412, from various newspapers, firms and individuals, the sportsman's association of Western Pennsylvania heading the list with the liberal gift of \$100.

CHIEF.—Supplementary to description of Chief from last week we have received the following additional facts regarding the sire and dam of Chief:

Berkley was trained by C. B. Whitford in the most thorough manner with a view to running him in the coming field trials. At Hampton, Iowa, he would have secured first prize had he not pointed a bittern, which was regarded as a fault, and the trials were run on chickens. As a field dog Berkley is in every way first class. Mr. Whitford saying, "that he is one of the most killing dogs he ever shot over." In Novem-

ber, 1878, Berkley was purchased by Mr. John Fottler, Jr., the President of the Massachusetts Kennel Club, of Boston, and at a price which at that time was considered a high figure. Mr. Fottler had numerous bitches bred to Berkley while the dog remained in his kennels, and his puppies are almost invariably grand field dogs, and of fine form and color. In February, 1880, Berkley was transferred to the kennels of his present owner, Mr. A. Moore, of Philadelphia, who paid an almost incredible figure for the dog (about one thousand dollars). Duck is one of the most noted Irish bitches now living. She is very stylish in field work, and many prominent sportsmen who are good judges consider her in every way one of the finest Irish bitches in America. Duck was purchased by Mr. Fottler as a mate for Berkley, and afterward was sold to Mr. Moore. She was transferred to the kennels of Berkley. Mr. Max Wenzel, the owner of Chief, showed good foresight and judgment in the choice. As soon as he learned that Duck had been purchased by Mr. Fottler and would be bred to Berkley he immediately wrote asking that his name be looked for first choice of Duck's first litter by Berkley, and stating that he had been long hoping for the opportunity, as he considered this pair the finest in the country. Afterward Mr. Wenzel paid a special visit to Boston to make his selection, which it seems was most judicious.

BEef TEA FOR DOGS.—Cleveland, Ohio, Dec. 13.—If puppies must be fed at times on extract of beef the enclosed receipt will prove the thing wanted. Your correspondent "Iomo" is correct when he states that Liebig's extract will kill quicker than starvation. There is a meat extract made by Johnson, of Montreal, that contains all the nutritive properties of beef, but it is too expensive for dog food, and for most human invalids. I inclose a receipt that will, I think, prove satisfactory.

Mr. Wilkinson, of St. Mary's Hospital, London, advises the following improved method of preparing beef tea: The meat is cut into small pieces, the fat removed (for dogs, at option of the cook, and placed, in the evening, in an earthenware vessel, with sufficient cold water to cover the meat; in this it is allowed to remain all night. In the morning the meat is taken out, placed in other water, and boiled for several hours. The meat is then cut into small pieces, and passed through a mincing machine, and put into the cold water in which the meat was steeped the previous night, and upon this the boiling liquor from the day's beef tea is poured, and the whole well stirred, and it then forms the complete beef tea. The characteristics of good beef tea are that all the nutritive elements of the beef should be made available; and by the process carried out as above this is effectually done, the albumen and gelatin being all retained and taken by the patient. The serum can in many cases be used with the extract. Moreover, by this method a much smaller quantity of meat is required than under the ordinary mode, and it would consequently not become a jelly if allowed to stand; but by adding a larger quantity of beef this result could of course be obtained. (This forms with us what is called beef jelly.) It should, however, be remarked that in very hot weather beef tea cannot be made in this manner, as it would become sour from the length of time required for its preparation. In hot weather the refrigerator can be used for the cold extract.

DR. E. STREBLING.

INSECT OR REASON?—No. 2.—Northfield, Vt., Dec. 14.—My English setter Ned, eight months old, is, I believe, the most intelligent dog I ever owned. He seems to know just what is said to him. He has had but little training in the field, and yet the first time I took him out with a gun I bagged four partridges, all of which he worked up and pointed as staunchly as any dog. He also retrieved at command without any fancy business. He was simply done perfectly. Of course he has had a pretty thorough schooling at home, but he adapts that schooling to his field work so nicely that it would please you to see him. I talk to him the same as I would to a person, and the way he sits and listens, with his large, laughing eyes fixed on mine, is very comical. He does many good and useful tricks, one of which is to get the friend of his "sisters, his cousins and his aunts." FOREST AND STREAM, of the Post-Office, on Saturday. I believe if every man who owns a sporting dog would take the pains to educated him the race would improve so much that in ten years the result would be surprising. One day last week I was detained at my office unusually long at noon-time, and noticed Ned was getting quite anxious to go to dinner, but paid but little attention to him until he commenced pawing my leg. I turned around to speak to him and was surprised to find he had brought both my overshoes and laid them at my feet. I put them on and went home to dinner immediately. Who doubts that well bred dogs have reasoning power? I do not, and have presented Ned with a nice plated collar, which he delights in scratching, but always sits down to do so thoughtfully. Doc.

CAPTAIN WILLIAM ROEHM EXONERATED.—The Lancaster Game Association met in Alderman Spurrier's office, Tuesday evening, the attendance being unusually large. The only item of public interest was the unanimous adoption of the following resolution:

Resolved, That after due investigation of the charges preferred against Captain William Roehm, of Quarryville, for having failed to properly preserve and protect the game upon the grounds near Quarryville, for the late meeting of the Pennsylvania Field Trial Association, we find that the said charges are unfounded; that the conduct of Wm. Roehm in the matter was entirely consistent with the character of a true sportsman.

THE FOREST AND STREAM takes pleasure in reprinting the above from the Lancaster, Pa., *Non Era*.

DOG CHAINS.—New York, Dec. 6.—I have a grievance, and a very grievous grievance it is too. I have lost my Gordon dog because his chain broke and he trotted away and was nabbed by some appreciative thief. Can't you tell us dog lovers where we can get chains that are not as heavy as an ox chain, and will yet hold a dog? If you will try you will find that a very moderate pulp will stretch apart the links of any fair sized dog chain, even if it is nickel plated and all fair to the eye.

MANTHAN.

The imported English dog chains are the best. They can be had of Schuyler & Duane, 189 Broadway, E. S. Harris, 177 Broadway and Hartley & Graham, 17 and 19 Maiden Lane.

LOST A POINTER PUP.—Mr. William Stone Abert, of Washington, D. C., has lost a fine pointer puppy, about ten months old. The dog was either stolen or strayed away on Decem-

ber 1, and a liberal reward has failed to bring about his return. Mr. Abert's only hope is now that some brother sportsman may see this notice and assist him to recover the youngster, which is a good one. Description: Lost from corner of L and 10th streets, northwest, a white pointer puppy, eyes light in color, ears liver, same color around left eye; right eye surrounded with white; two liver spots side of body; one larger spot on other side; tip of tail cut; hair very fine; had on a steel chain collar, with owner's name engraved thereon.

MR. R. M. LIVINGSTON'S BULL BITCH.—*Rye Beach, N. Y., Dec. 17.*—Editor *Forest and Stream*:—I have just received the bull bitch; she came on nicely in good condition, and up to present time is doing very well. Her pedigree is as follows: "By Young Gully out of Rose. Young Gully by Champion Bull Gully out of Daine. Daine by King Crib out of Berie's Wasp. Berie by White Crib out of Bounce, sister to prize dogs the Abbees, Cluiput and Sugar. White Crib, owner brother to Champion Alexander. I will be in New York with her in about a week and will bring her in to show you.

R. M. LIVINGSTON.

A CURE FOR MANOE.—*New York, Dec. 8.*—Perhaps some of your readers might like to know that sulphur of potassa will cure mange. It acted like magic on my setter when all other things—tar, etc.—had failed. Mix it with muriatic acid as per prescription in "Hallowell's Gazetteer," and hold your nose while applying it.

MANTHAN.

The above "cure" is an old one, and not much use unless combined with sulphur ointment, or some other active agent.

MR. W. W. TITUS, of Centerport, L. I., handler of Mr. Livingston's Baronet, at the late field trials on Robin's Island, contemplates a visit to North Carolina, about January 6th. He has already secured three dogs to handle during the three weeks of his sojourn, and will take three more. Parties wishing to avail themselves of this excellent opportunity to have their dogs handled in a section where game is usually plenty cannot do better than address Mr. Titus at once. Mr. T.'s card appears in another column.

IMPORTED FOX HORSE.—On board the steamer Greece, which arrived in this port on Sunday, was the splendid fox hound bitch Blue Bell, shipped by Dr. Gordon's Stables at London, Eng. The bitch was consigned to Mr. E. B. Goldsmith, Forwarding Agent, and re-shipped by him to her new owner, Mr. C. B. Wright, Concordia, Ky. Blue Bell is a very handsome animal and arrived in fine condition.

A FOX TERRIER FOR SALE.—Any one wishing a fine fox terrier about three years old can apply at once to TENNER, care of this paper.

WANTED CHESAPEAKE BAY DOGS.—Breeders of Chesapeake Bay dogs will please send their addresses to the Kennel Editor of this paper.

KENNEL MANAGEMENT.

28 H. D., Meadville, Pa.—My pointer pup, two months old, is ruptured. Can you inform me what I can do for him? Ans. Unless you can secure the services of a skillful surgeon to perform an operation for the radical cure of hernia, which at best is a dangerous one to attempt, a band placed around the dog and a compress of cork to keep the bowels in place are the only means at your disposal.

29 W. B. L., New Orleans, La.—My pointer dog, now nineteen months old, having successfully encountered in battle with worms about eight months since, thanks to antonine, and fully developed into a most satisfactory field dog and a most valuable companion, whose loss would seriously affect me, has now succumbed to what I think is distemper. I observed about ten days since a loss of appetite and spirits. I administered a light purge which temporarily relieved him. Four days since more alarming symptoms appeared, as refusal of food, emaciation, decided cough, difficult breathing, mattery eyes, one more affected than the other, nose apparently closed, with slight discharge of mucus, extreme weakness and loss of flesh. Give day before yesterday two tablespoonful of salt. Last evening, being fully determined upon distemper, applied a seton to the back of his neck. Administered to pill, proposing to repeat. Shall give two pills daily until further developments. Please advise me in your next issue if I am correct in diagnosis, and what treatment to pursue. Ans. Probably distemper, but by the time this reaches you a tonic treatment is best. Give quinine, two to three grains, three or four times a day, and administer strong meat broths every two or three hours. Keep the dog warm and dry and allow him plenty of fresh air, particularly if his discharges are frequent.

30 J. E. M., Bridgeport, Conn.—Please advise me what to do for my Scotch terrier dog, nine months old. He coughs continually and appears to be rather short of breath. Quantities of matter comes from his nose. He acts rather dull most of the time. Ans. Probably the first stage of distemper, but when this reaches you the disease will be so far advanced as to require tonic treatment. Give two grains of quinine twice a day, and a small quantity of strong meat broth every three hours. If you had signed your full name to your communication we would have been able to reply by mail.

31 H. L. G., Brookfield, N. Y.—My fox hound, four years old, has had distemper for about six weeks; was taken with sneezing, and at times blood came from his nostrils. As he seemed better I hunted him for two days. Since then he has been much worse. Yellow matter runs from his head. He is weak and moves with difficulty; coughs as though something was in his throat. Pulse runs high; sometimes at 123, but stands at about 100. The color is very thirsty and has some appetite. Water scanty and high colored; some diarrhoea. Have given him quinine and poke-root, also tincture of iron. He has had two fits. He breathes thirty-three times a minute. What shall I do for him? Ans. Give nitrate of potash, eight or ten grains, two or three times a day, and, in addition, two grains of quinine three times a day. Drop the other remedies.

32 T. S. R., Erie, Pa.—My Irish water spaniel, six months old, has changed his puppy tricks nearly two months—or, say, six weeks,

He is very healthy. Within the last four or five days long strings of slimy saliva hang from each side of his mouth. I have looked for a bone between his teeth, but find nothing wrong in his mouth. Do dogs at his age out their back teeth after their tusks? Does it cause trouble as with children? Ans. Yes. The dog is suffering from irritation of the salivary glands, caused by teething. Give a little sulphur and castor oil once or twice a week.

33 V. H. W., New Britain, Conn.—I have a dog, half Newfoundland and St. Bernard, nearly four years old, that has been sick nearly three weeks. He began with lolling and loss of appetite, and wanted to be in some remote place. He has grown so weak in his hind parts that it is almost impossible for him to get up, and he is reduced to skin and bone. He has not eaten as much since he has been sick as he would generally eat for one meal, but will eat great quantities of snow. What shall I do for him? Ans. A dog in the condition you describe should be tied up in comfortable and secure quarters, especially if he seems nervous, in case it should turn out to be rabies, to which the few symptoms you give seem to point. Try a few (but large) doses of quinine, say five grains twice a day for a week. Will you do fully.

34 C. S., Muncy, Pa.—My setter dog has the distemper badly. I have tried several things, but they don't appear to help him. What shall I give him? Ans. As you fail to state the age of the dog or give necessary particulars it is impossible to prescribe. We would advise, however, to try a tonic treatment.

35 J. H. L., Camillus, N. Y.—My setter puppy, seven months old, is troubled with sore eyes. I have washed them carefully with castile soap and warm water, and have applied a liniment of carbolic acid and glycerine, but he does not get better. There is no offensive smell from his ears, but on the next day after washing them his ears will be covered with dry blood. What is the correct treatment? Ans. From your description the dog is evidently suffering from canker, the membrane of the ear being so congested or inflamed as to yield some blood. Keep ears clean by syringing with tepid water. Reduce his system by cooling food, such as vegetable diet. Avoid giving meat, and administer once every other day a dose of Epsom salts—say a tablespoonful. Pour a teaspoonful of the following mixture in his ears twice a day: Lead water, one ounce; or two drops of carbolic acid, with large half teaspoonful of glycerine added.

36 S. D. R., New York.—My setter dog (ever since he had the distemper) discharges from his eyes a transparent mucus in the morning. Can I cure them by some simple remedy, or had I better take him to a doctor. Ans. You had better show the dog to a competent surgeon. There may be necrosis which causes the running you describe. Wash the eyes with tepid water.

37 G. H. B., Watertown, N. Y.—Your dog has internal cancer in this corner. Pursue same treatment as recommended to J. H. L. in this column. Persevere and write result.

38 D. H. L., New York City.—I, my English setter bitch, with four puppies two weeks old, have the mange. 2. The puppies have little black sores all over their bodies. 3. My setter dog is in a very bad state. His hair has fallen out, and he has sores on his head and legs. He is very thin and passes water very often and very much at a time. What shall I do? Ans. 1, 2 and 3 Try Glover's mange cure, and give the setter dog nitrate of potash, eight or ten grains, twice a day for three or four days.

39 L. M. G., Attica, Ind.—My English mastiff dog, three years of age, is quite sick. Two weeks ago we noticed he would not eat. Then he got very stiff all over, but worse in his right hind leg, which he will barely touch to the ground. He has become very poor and sunken at the flanks. He walks very slowly and stops to rest every little while. This morning, for the first time, he seemed in pain, growling a little. What can be done for him? Ans. Your dog evidently has rheumatism. Give Epsom salts, a desert spoonful twice a day. Later on three grains of quinine twice a day will be of benefit to him.

40 U., Westfield, Mass.—I have been greatly interested in reading your excellent paper for the past two years that I have been a subscriber to it, and articles pertaining to pointers and setters and guns and game are those in which I take the greatest interest, and which, on receipt of the paper, I always seek for first, and for some time past have been hoping some of your correspondents would give me the necessary instructions to break my setter from a bad habit that seems to be growing on him; and not finding it as yet, I decided to ask for it. When I take the dog into the woods after partridge, if I allow him to get, say 100 feet from me, he will start off sometimes on a sharp run and pay no attention to either call or whistle, unless he should strike a strong scent, when he will stop and go to work as carefully as any dog, but that may be a quarter of a mile from where he left me. He is as staunch as a rock, and will bring the birds in without biting them. And, aside from the habit he has of starting off as described, is as good a dog as any one could ask for. Now, will some one who has overcome this trouble tell me how to go to work to break my dog of it? Do not say shoot him if he doesn't stop, for he has two clippers in him now, and I will not do that again. I have tried scolding him and whipping him for it, but all to no purpose. Sometimes in going from my place of business to my dwelling house he will lower his head and start off into a smart trot, and neither calling nor whistling will make him return until he gets ready. He was two years old last June. Ans. As you have tried both your hand and gun in attempting to make your dog obedient and have failed, we cannot advise you better than to place him in the hands of an experienced dog trainer, who will, with the aid of a check cord, get him into shape and make him mind.

CURRENT DOG STORIES.

XXII.

A elated picker at one of the Mill Creek coal breakers discovered a spotted setter under the pockets a few days since. Mill Creek is the leading coal centre of the Delaware and Hudson Canal Company. The dog was mischievously put into an empty gravity coal car. The car was run under the chute, and soon afterward a ton of chestnut coal were dumped upon the dog. The car was taken away at eight o'clock. The coal from Mill Creek is shipped via the Gravity Railroad to Honesdale, and there transferred into Erie cars for shipment East. This car arrived at the foot of No. 1 plane at 7 1/2 o'clock in the evening. The workmen at the foot of the plane, hearing cries of distress which they supposed to be the moaning of a child, switched the car, determined to solve the mystery. The car was unloaded, and the dog, after a ride of

twenty miles under this pile of coal, appeared upon the scene in good condition. The owner, who lives at Mill Creek, learning of the whereabouts of his dog, sent a messenger with a check for \$50 to the lucky workmen who rescued the animal.—*Exchange*.

XXIII.

Iowa Hall can boast of a dog that out-Tanners Tanner, having lived forty-two days without food or water. On the 16th day of September the animal, owned by Mrs. Armstrong, of Bird's Flat, disappeared from the house. They travelled much at its prolonged absence, and, after futile inquiries and search, concluded that it had come to its death from cause unknown. On the 28th of October a neighbor out hunting cows was attracted to the edge of an old shaft by a faint yelping at the bottom. Peering down the shaft he discovered the lost dog animal. A ladder was secured and a boy sent to the rescue of the long-lost dog, which could only shiver and laboriously move its tail for joy. The bottom of the shaft was tramped as hard and smooth as marble, and the sides as high as it could possibly have been. The dog, however, managed to escape. A diet of warm water and milk was administered, and at last accounts it was recovering rapidly. Its weight before it disappeared was more than one hundred pounds, and when found it was less than twenty.—*Placer (Cal.) Argus*.

XXIV.

In the southern part of Bolton there has lived for six or eight years past an Englishman, about sixty, by the name of Woolrich, who did not appear to be doing much for a living. He kept five dogs—some of them ugly—and few people went near the place. Last Thursday morning the dog was left with First Sergeant White that Woolrich had not been seen for several days. Messrs. White and Summer, two resolute men, went to the house. They were greeted by the furious onset of a large coach dog, who, on their opening the door wide enough to look in, bounded forward with ominous growl and a display of teeth that meant mischief. The men shut the door and went to the window. Looking in, they saw Woolrich sitting in a chair by the stove, his head bent forward as if asleep. Unable to rouse him, and the dog continuing to exhibit the ugliest symptoms, it was resolved to kill him. Mr. White had brought his gun, but the dog kept so near his master, as if guarding him, that it was not deemed safe to fire from the window; and, raising this, the visitors hurled a stone, to start the dog forward. He dashed at them with a furious bound, when the gun was discharged, killing the faithful dog instantly. Going into the room the visitors discovered that Woolrich was dead. Probably he had been dead several days, and had been frozen to death. He was not known as a drinking man. His other dogs, starved out, had left him, but this one faithful and formidable animal had refused to desert him, and stood at it out bravely by his side, in cold and hunger. The dog fell a martyr to his devotion and fidelity.—*Hartford Times, Dec. 13*.

KENNEL NOTES.

NAMES CLAIMED.

Macduff—Mr. Harry B. Livingston, of New York city, claims the name of Macduff for red Irish setter dog puppy out of Pierce's Gussie by Rory O'More, whelped July 8, 1890. The puppy is now being trained by Mr. H. B. Wygant, Peckskill, N. Y.

Linda—Mr. Hugh L. Williams, of Saratoga Springs, N. Y., claims the name of Linda for his short-haired thoroughbred St. Bernard bitch, whelped Oct. 12, 1879, out of Mr. B. Louze's Alpe, by Mr. B. Jernan's Chianunin.

Lady Mag for Mr. H. D. Bonner, of Nyack, N. Y., claims the name of Lady Mag for his black and tan Irish setter bitch, whelped by Lady Mag for out of Maud Mill (Rob Roy-Pochontas) bred by Mr. W. A. Irvin, Kokomo, Indiana.

Rochester Ben—Mr. C. J. Bishop, of Monson, Maine, claims the name of Rochester Ben for black and tan foxhound, sixteen months old, bred by Mr. M. L. Woodie, out of Ben by Driver.

Dora Bell—Mr. J. C. Bishop, of Monson, Maine, claims the name of Dora Bell for black and tan foxhound bitch, eighteen months old, out of Fan by Chase (titter sister to Blue Beard).

Charlie H.—Mr. Robert Walker, of Franklin, N. Y., claims the name of Charlie H. for liver and white cocker spaniel dog puppy by Champion Charlie out of Daisy II.

Queen of Egypt—Mr. J. J. Jennelle, of Du Quoin, Ill., claims the name of Queen of Egypt for a beautiful bitch puppy reserved for himself out of the Little Lady (Daisy II.) by Duke.

Barkis—Lieut. Fred W. Foster, U. S. A., Fort Laramie, W. T., claims the name of Barkis for Irish water spaniel dog puppy out of Lady by Barney.

Mickey Free—Capt. A. E. Woodson, U. S. A., Fort Laramie, W. T., claims the name of Mickey Free for Irish water spaniel dog puppy out of Lady by Barney.

Peggy—Lieut. Fred W. Foster, U. S. A., Fort Laramie, W. T., claims the name of Peggy for setter bitch puppy by Jake out of Phyllis.

Tom—Mr. John Fonda, Brooklyn, N. Y., claims the name of Tom, Jr., for his black and tan setter, whelped August, 1880, out of Geo. E. Brownie's Nellie Horton (formerly Dr. Aten's) by Doan's Tom, presented by Dr. E. B. Godeffroy.

Ivanhoe—Paymaster L. G. Billings, U. S. N., Annapolis, Md., claims the name of Ivanhoe for his red Irish setter, whelped July 2, 1890, out of F. N. Hall's Rose Bradwardine by A. E. Godeffroy's Rover II.

Queen Elizabeth—Mr. F. N. Hall claims the name of Queen Elizabeth for his red Irish setter, whelped July 2, 1890, out of his Rose Bradwardine (Elcio-Bess) by A. E. Godeffroy's Rover II. (Rover-Pamela).

Bessie B.—Daniel J. Duffy, of Chattanooga, Tenn., claims the name of Bessie B. for red Irish bitch, seventeen months old, by Champion red Irish setter Bob, imported by E. T. Stoddard, of Dayton, Ohio, out of Dr. Geo. Hall's Gypsy.

Phil—Daniel J. Duffy, of Chattanooga, Tenn., claims the name of Phil for red Irish setter dog, one and one-half years old, by imported Don (imported by Chas. Turner, Secretary of Mutual Kennel Club, St. Louis, Mo.), in December, 1879, from C. Cooper, Esq., Limerick, Ireland, out of Maud, and Maud is out of Waddell's Pilot and Gypsy.

SALES.

Ruby—Mr. Robert Walker, Franklin, Delaware County, N. Y., has purchased from F. F. Fletcher, Claremont, N. H., his bitch Ruby (imported) by Bulp. Price, \$100.

Belle II.—Mr. Robert Walker has purchased from Mr. Chas. E. Lewis, Suspension Bridge, N. Y., black and tan bitch Belle II. late Pauline (Waddell's Bell-Bean).

Ruby and Rose—Mr. Robert Walker, has purchased from Mr. D. P. Sledge, Frankford, Delaware County, N. Y., cockers Ruby and Rose (Flusher-Fannie II).

Joseph—Mr. F. L. Sheldon, Rahway, N. J., has purchased from Mr. Jerry Cockerell, Memphis, Tenn., setter dog pup, whelped June 27, 1890, out of Lady Clara by Joe, Jr.

Miss June—Mr. F. L. Sheldon has purchased from Mr. Jerry Cockerell setter bitch pup, whelped July 23, 1890, out of June by Gladstone.

Little Lady—Mr. Isaac Yearsley, Jr., has sold to Mr. L. D. Rumsey, Butte, N. Y., a setter bitch Little Lady (Daisy II.-Rosy).

Tom and Trouble—Dr. E. Day Bristol, Jr., has sold to Mr. Alex. Taylor, Jr., New York city, the brace of pointers Tom and Trouble.

Rolls-Madcap Whelps—Mr. Geo. D. Macdonnell, Lacine Kennels, has sold to Mr. D. J. Henderson, Almonte, Ont., a brace of black and white dogs, Rolls-Madcap.

Ranger-Daisy Whelps—Mr. John White, Bridgeport, Conn., has sold to Mr. J. O. Donner, four white and orange tickled Ranger-Daisy whelps. Whelped June 10, 1890.

Wildcat-Cora Whelps—Mr. Geo. D. Macdonnell, Lacine Kennels, has sold to Mr. Percy R. King, New York city, a liver colored dog (white frill), and a liver and tan dog (white frill), Wildcat-Cora.

Rack—Mr. Geo. D. Macdonnell, Lacine Kennels, has sold to Mr. J. T. Hulse, Circleville, Ohio, a black dog with white breast and toes, Wildcat-Cora.

Bess—Granby, Ct. Dec. 18, 1890.—I have just learnt from Geo. Fowall, Chattanooga, Pa., his well-known prize winning English pointer Bess. She arrived the 16th in fine condition, and is in whelp by Victor—will whelp the 22d. She was shown at Boston, 1878, and easily won first prize, and Forest and Stream in report of show said, "That Mr. Fowall, of Chattanooga, showed his beagle Bess, which was by long odds the best dog in the lot."—N. Elmore.

PRESENTATION.

Elcho II.—Dell Whelp—Dr. J. J. Jennelle, Du Quoin, Ill., has presented to Mr. J. W. Wilkinson, Vermont, Ill., a bitch puppy out of Dell by Elcho II.

Wildcat-Cora Whelp—Mr. Geo. D. Macdonnell, Lacine Kennels, has presented Mr. A. E. Godeffroy, Garyard, N. Y., a chestnut and tan bitch with white frill, Wildcat-Cora.

WHELPS.

Rose—Dr. Wm. Jarvis' (Claremont, N. H.), Rose whelped on December 6, five dog puppies by Elcho.

Minna—Mr. Isaac Yearsley, Jr., Minna has whelped five puppies by Vixen (Leicester-Sashbury's Nellie).

Rose—Mr. N. Elmore's English hound Lingle Bess (winner of first prize at Boston, 1878), has whelped three bitch puppies by Victor. All sold.

Nita—Paymaster L. G. Billings' black and tan Nita (Thicket-Nell), whelped December 12, three, all dogs, by Dr. Allen's Glen. One puppy has since died.

Belle—Mr. F. Campbell Moller's (New York city) black and tan setter bitch Belle (Gale's Italy-Finley's Uno), whelped Nov. 25, eight puppies, five dogs and three bitches by Mr. Frank Cozen's Rump.

Mona—Mr. G. W. Bassford's bitch Mona by Rory O'More, whelped December 12, three puppies, three dogs and two bitches, sired by Iron Duke.

BRED.

Princess-Flash—Mr. Geo. G. Barker's (Boston, Mass.), champion pointer bitch Princess (Ranger-Fan) to Dr. A. Russell Strachan's Flash (George-Yeg).

Gypsy-Sensation—Mr. Duer's (Orange, N. J.), Gypsy to Sensation. Gypsy was formerly the property of Messrs. Lincoln and Heller.

Prairie Rose-St. Elmo—Mr. F. L. Sheldon's (Rahway, N. J.), Prairie Rose to St. Elmo on December 9.

Frank—Mr. P. A. Huffman, Thorntown, Ind., has presented Col. Samuel Goodman, of Philadelphia, with his fine quail dog Frank.

A SAD ACCIDENT.

A LAMENTABLE accident occurred week before last in New Jersey, which resulted in the death of a valuable pointer dog. The circumstances, which were peculiarly distressing, are as follows: Mr. K., the owner of the dog, with a companion, had been shooting and killed several birds. The dog, however, had flushed Mr. K. killed two birds with one barrel, and, after loading, the dog was sent to fetch the birds. As he approached with one of them, his master took a few steps forward, and, catching his gun in a grapevine, fell forward upon his gun. The stock was broken and the gun discharged, the entire charge passing through the dog, which was now within a few feet of his master. The brave animal, without uttering a sound, continued to advance, dropped the bird at his master's feet, licked his hand, looked up with an expression of fondest affection, and fell over dead.—*Forest and Stream, Nov. 18, 1890*.

Forewell, my dog! A last farewell

I say to thee, a friend so true.

Words can never, never tell

The thoughts that in my bosom swell

Toward one I loved as you.

Forgive me, dog, my sad, sad lot!

Your eyes look love and try to say,

"Forgiven you are; I blame you not.

You did not mean this fatal shot

Should harm your friend who dies this day."

Your master knows your love so strong:

Your acts, the last so sadly tell

When, bleeding fast, you crawl along

To lick the hand that caused you wrong—

To die by friend you knew your best.

Wellsville, N. Y., Nov. 27.

CLARENCE A. FARMER.

ONE AMONG A THOUSAND—*Burling, N. Y.*—Editor *Forest and Stream*: Several weeks ago a friend from the East had been on an extended shooting trip in Illinois. He took with him several fine dogs. Upon his return here he left one with me to breed to a valuable bitch I own, and which will shortly be in use. After the dog had been with me a few days I discovered he was killing. He soon became so bad as to cause great anxiety upon my part. I had but little faith in his "vets," as I had previously had and experience with them, as also had some others whom I knew. I was at my wit's end, when finally an old horseman and a great lover of dogs happened in my office. I stated the case to him, when he recommended Dr. Robt. C. Hutchings to me. I called on the Doctor and plainly told him my lack of faith in vets for dog practice. We went up to see the dog. The Doctor gave him a thorough examination from the tip of his nose to the root of his tail. Watched and studied his every movement for a long time, asked numerous questions and finally diagnosed the case as being inflammation of kidneys and bladder, extending also to penis, which proved to be correct, and a very bad case it was, too. The Doctor took him in charge, and in about four days he had the dog about cured; in fact, so much so that I shipped him to his owner (nearly five hundred miles away) the other evening. Of course you can imagine how pleased I was in being able to do so.

Should this meet the eye of any in my immediate vicinity who has a sick canine friend he may have no fears to place him in the hands of Dr. Hutchings, where he will not only receive proper treatment and care, but will at once feel that he is in the care of a true friend. Since my experience with Dr. Hutchings I have learned of several critical cases that he has been successful with. I will give you two. A gentleman here has an old pet bull terrier of large size. He is very old. This summer a fire engine ran over him and broke his foreleg. The gentleman called in an eminent physician and surgeon, who pronounced him beyond aid and recommended him destroyed. Dr. Hutchings was called, set the limb, put it in splints, and to-day the old veteran wags his gratitude every time he meets the doctor.

A LOVER OF THE DOG.

FOR SALE.—A grand liver colored pointer bitch, Flora, out of Lady II. by Flash; one and half year old; has had some field experience; a fine bred grouse dog, fast and retrieves properly. Flash, the sire, is a noted dog, being out of Peg by Dr. Strachan's George. Address FORTY-THREE of this office.

Forest and Stream:
no fault to find with the article of "Canvas Back," only I
other canoe men prefer cedar to canvas or metal. I ad-
the good qualities of the canvas canoe on small lakes, bayous,
g-holes and some river work, such as ducking, trapping, etc.
t she won't float you in case of an upset, and she is slow and
c me when on open water in a wind. As to the birch-bark

B. F. NICHOLS & CO.,

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SALMON, BASS AND TROUT
FLY AND BAIT RODS
of best quality. Six strands from butt to tip.
German silver mountings.
- EVERY ROD WARRANTED.
Satisfaction guaranteed. Send stamp for
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The Novelty Pocket Scale
Is warranted to weigh accurately from two
ounces up to fifteen pounds. It is made of
metal, heavily nickel plated, and can be car-
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inconvenience. Sample and terms to agents
only 50 cents. Send for circulars of other
new and fast-selling inventions. The only
pocket scale ever invented that weighs up to
fifteen pounds. The Trade supplied.
GEORGE BETTS, 515 Broadway, New York.

ADVERTISEMENT.—For sale, a Relfly double
Express Rifle, in case with implements com-
plete; has never been used; cost between \$50 and
\$400 to Philadelphia. Will be sold low. Address Box
1,700, Philadelphia P. O. Dec23,91

ANTHUS FOR SALE.—Some fine elk, deer and
antelope antlers, also buffalo heads; or would
make an exchange for a Greener shot gun, ten-b-
ben gauge, and must be a close, hard shooter. WM. A.
ALLEN, Canoe Creek, Montana. Dec16,91

FOR SALE AT A BARGAIN. A treble-bolted
hammerless breech-loading shot gun; 50-inch;
twelve gauge; seven and seven and three-
fourths pounds. For further particulars address
CHAS. MILLS, Lexington, Ky. Dec 10,91

FOR SALE. Sharps .45 cal. sporting rifle, pistol
grip; in beautiful condition; just as it left fac-
tory; cost, with tools, shells, bullets, primers, etc.,
\$10. Will sell entire for \$50. Also 16-gauge, pistol
grip, rebounding lock, top action, fine Damascus
gun; cost about \$125. Will sell with tools, case,
loaded shells, etc., for \$10. Will sell cheap as
they are no use to me. Address G. A. DAYEN-
PORT, Davenport, N. Y. Dec30,91

FOR SALE. W. & C. Scott & Son top lever, double
bolt, Damascus 52-inch barrels, 10 bore, 10 lbs.;
all improvements; sold for no fault; extra
shooter; at half the cost. Address L. A. DAYEN-
PORT, Davenport, N. Y. Dec30,91

Wanted.

WANTED. A breech-loading shot-gun; second-
hand, but in good repair. Price must be very
low. Address Box 613, New Haven Conn. Dec23,91

The Kennel.

POULTRY & DOG SHOW

GIVEN BY THE

WESTERN PENN. POULTRY SOCIETY

AT
PITTSBURGH, PENN., Jan. 13 to 19,
(INCLUSIVE)

DOG SHOW

Commences on the 17th and ends on the 19th of
January at 10 p. m. ONLY THREE DAYS.

ENTRIES CLOSE JANUARY 6.

CHAS. LINCOLN, C. B. ELLEN,
Superintendent. Secretary.

Address LOCK BOX 303, Pittsburgh, Pa.

LOST a setter dog from 22 Franklin Place, Rox-
bury; a jet black color; handsomely feathered;
white star on breast; answers to the name of
Sam. Any one returning him to J. W. ROSTON,
22 Franklin Place, Roxbury, Mass., will be hand-
somerly rewarded. Dec20,91

FOOT SALE. A slashing young field spaniel dog,
liver, white and tan; thoroughly broken in on
ruffed grouse and woodcock; a superb retriever;
strong and healthy. Price, \$50. Address ROBT.
WALSH, Franklin, Del. Co., N. Y. Dec20,91

DOGS TRAINED.—I propose visiting an excel-
lent game season in North Carolina after the
first of the year and am anxious to secure a few
dogs in all. Three of this number I have already
secured, and I will engage to take but three more.
My references are: Mr. H. W. Livingston, New
York City; Mr. E. H. Madison, Brooklyn, L. I.; Mr.
H. W. Huntington, Brooklyn, L. I.; and Mr. S. H.
Apost, Brooklyn, L. I. W. W. TITUS, Centerville,
L. I., N. Y. Dec20,91

A GOOD BOOK—THE DOG.

By DINKS, MAXHEW & HUTCHISON.

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FINE HAND-MADE REELS.

All these reels are made with best quality screws, so that they can be taken apart if necessary. Any of these reels may have either
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Capacity of reel.....	20 YARDS.	25 YARDS.	30 YARDS.	40 YARDS.	60 YARDS.	80 YARDS.	100 YARDS.	150 YARDS.
Polished brass plain handle with stop.....	.65	.70	.75	.80	.85	.95	—	—
“ “ balance “ no “.....	.75	—	—	.90	1.00	1.15	—	—
“ “ with bush bearings, click.....	—	1.35	1.45	1.55	1.65	1.95	—	—
“ “ hard rubber, bush bearings, click.....	—	—	—	2.75	3.00	3.25	—	—
“ “ best q’y, (Aber pattern).....	—	—	8.00	8.00	9.00	10.00	11.00	—
“ “ brass, plain handle, multipl’g with stop.....	—	1.30	1.40	1.50	1.60	1.75	—	—
“ “ balance “ better q’y.....	—	2.30	—	2.40	2.60	2.75	3.25	3.75
“ “ “ best “.....	—	3.00	—	3.25	3.50	3.75	4.25	4.75
“ “ G. S. balance handle, “ “.....	—	4.50	—	5.00	5.75	6.50	7.25	9.00
“ “ hard rubber balance handle, multi- plying, best quality, steel pivot, with ad- justable click (Imbric patent).....	—	—	—	—	11.00	12.00	14.00	16.00

A complete line of common reels always in stock. Also full assortment of Extra Quality Cuttyhunk and Salmon Reels.

DISCOUNT TO THE TRADE ONLY.

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WILL BE SOLD CHEAP TO CLOSE OUT STOCK.

Carlowitz, Blue Bull (Carlowitz-Princess Nellie),
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(Carlowitz-Queen Bess), True (Carlowitz-Princess
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Blanche (Carlowitz-Queen), Enclose stamp for
prices, etc. E. C. VON CULIN, P. O. Box 22,
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PINE LODGE KENNELS.—I am pre-
pared to take a limited number of dogs,
either setters or pointers, and train them thor-
oughly. I give my puppies seven months work
out of the twelve, and guarantee satisfaction, if
the dog has all the natural instincts. Refer-
ences on application. Prices \$30 and \$35, ac-
cording to length of time I keep the dog, with
discount to parties at long distances. A.
WINTRE, Cairo, Thomas County, Georgia. Oct 2,91

CLEN-B. and T. by Colburn's Dash ex Mul-
lin's Belle. The above dog, winner of first
in brace stakes of the Eastern Field Trials; will
be allowed to serve a few bitches of approved
form and blood. Stud fee \$25, and \$2 for
room. Address
H. F. ATEN, M.D.,
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ST. BERNARDS FOR SALE.—The un-
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for sale several magnificent imported Mount St.
Bernard dogs and bitches, carefully selected from
the best European strains. To be sold for no
fault. For prices, pedigrees, etc., address,
Sept 18-91
Le ROY Z. COLLINS,
Lancaster, Mass., U. S. A.

OUTLET KENNELS.—For pure Cocker
Spaniels of all ages—also in the stud, pure
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feather; will serve bitches at \$100; litters guar-
anteed. Address ROBERT WALKER, Keeper
Vulcan Kennels, Franklin, Del. Co., N. Y.

CHAMPION TRIMBUSH.—This celebrated im-
ported Cocker Spaniel, orange and white, has
been placed for the season in the stud. Fee \$20.
Apply to FRANCIS O. DE LUZE, 18 South William
Street, New York. Dec23,91

EVEN PUPPIES FOR SALE. sire son of Plunkett,
S and dam a black and white Gordon setter.
Price \$5. Born on 15th Nov. W. H. MOORE, Belle-
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RED FOX, Skunk, Raccoon and other furs
L bought for cash—highest prices. Send for cir-
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COCKER SPANIEL
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I keep only young stock. I guarantee satis-
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These beautiful, and intelligent dogs cannot be
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RORY O'MORE KENNEL.—Champion
Rory O'More in the stud. The handsomest,
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COCKERS IN THE STUD.—STELL, black, by
Imp. Shot-Imp. Rose. DOCTOR, Jr. (second
New York, 1879), liver, by Imp. Jack—Brownie.
Fee \$15 each. Also best of puppies for sale. Ad-
dress the IACHINE KENNEL, 1,182 Chestnut st.,
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FOR SALE OR EXCHANGE for shot-gun my
dark liver and white cocker spaniel bitch
Pinky, ten months old; sound, healthy and a
beauty. Address A. McDONALD, Box 289, Rock-
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PORTRAITS of Eastern Field Trial Winners,
printed on card stock—paper, will be sent post-
paid for 25 cents each, or the live for \$1. FOREST
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FOR SALE low English beagle hounds; import-
ed and bred by G. D. LEONARD, Binesburgh,
Vermont. Dec25,91

FOR SALE a splendid lemon and white pointer
bitch, 3 years old, broken, and five beautifully
marked puppies. Will sell very low, together or sepa-
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SCORATCHES.
GLOVER'S IMPERIAL MANGE CURE is war-
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or skin diseases of any kind on dogs or cattle
without injury to the animal. One application
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Agents: Conroy, Bissett & Malleson, 65 Fulton
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Author of the
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Setters and Pointers thor-
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Young Dogs handled with
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Dogs have daily access to salt
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N. B.—Setter and Pointer
puppies; also, broken dogs for sale; full pedi-
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IN THE STUD.—Gordons: black and tan, sire
S. B. ex Rhoda. 1880. E. K. C. S. B. dam Whip. Stod-
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of Locust Valley: black and tan, limited to 6 bitches;
sire, Toledo Kennel Club's Imported Grouse, E. K. C.
B. B. 5. dam, 3d prize winner, Grouse's, 1879.
Fee \$25. Pups from the above and others of best
kno'n Gordons on hand and for sale, also matured
bitches in whelp. Address JAS. R. TILLEY,
Locust Valley, L. I. Nov25,91

FOR SALE.—My red Irish setter bitch Nora, with
the best of pedigrees; six months old. Pointed
and retrieved her first trial, and is a slasher in the
field. Price \$20. Address W. J. MORTON, Port-
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STONEHENGE ON THE DOG.
Price \$3.50.
For sale by Forest and Stream Publishing Co.

AGENTS FOR CARD'S NEW DOUBLE REVOLVING TRAP.
Howard's Steel Head Shells—Quality guaranteed. Price lower than any other.

Remington's Military, Sporting & Hunting Repeating Rifles.

Simplest, Most Efficient, Indestructible. Adopted by the U.
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.45 Cal., 70 Grain Standard Government Cartridges.
Prices: Carbines, \$22; Frontier Rifles, \$22; Sporting and Hunting Rifles, \$25.
Discount to the Trade Only. Send for Catalogue and Price Lists.
E. REMINGTON & SONS, 283 Broadway, N. Y. P. O. Box 3,994.

The Daly Gun,
HAS FINER BARRELS,
THE FITTING IS SUPERIOR
To any other Gun
COSTING TWICE THE MONEY.
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Lists furnished on application.
SCHOVERLING, DALY & GALES,
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Hotels and Houses for Sportsmen.

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FOR THE
Trout, Grayling, and Black Bass Fisheries,
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FAMOUS SUMMER RESORTS AND LAKES
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NORTHERN MICHIGAN.

The waters of the
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if equaled, in the abundance and great variety of
fish contained.
BROOK TROUT abound in the streams, and
the famous AMERICAN GRAYLING is found
only in these waters.
The TROUT season begins May 1st and ends Sept. 1.
The GRAYLING season opens June 1 and ends
Sept. 1.
BLACK BASS, PIKE, PICKEREL and MUSC-
LONIE, also abound in large numbers in the
many lakes and lakes of this region.
The sportsman can readily send trophies of his
skill to his friends or "club" at home, also for
packing and can points.
TAKE YOUR FAMILY WITH YOU. The scenery
of the North Woods and Lakes is very beau-
tiful; the air is pure, dry and bracing. The
climate is peculiarly beneficial to those suffering
with
Hay Fever and Asthma Affections.

The hotel accommodations are good, far sur-
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During the season from Trip Excursion Tick-
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facilities offered to Tourists and Sportsmen.
Duck, Grouse and Fishing Tackle Carried Express
freight risk.
It is our aim to make sportsmen feel "at home"
on this route. For Tourists' Guide (an attract-
ive little book of 60 pages), containing full in-
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Grounds of Virginia.

West Virginia,
Comprising those of Central and Piedmont Vir-
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Rivers, and Kanawha Valley, and including in
their varieties of game and fish, deer, bear, wild
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The Only Route via White Sulphur Springs.

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Richmond, Va.

may 17

LONG ISLAND R.R.—SPRING SCHED-

ULE taking effect March 14th, 1890.—Leave
HUNTER'S PT (Flatbush Ave., E'dk'n, 5 min.
earlier) for
Babylon, 8:35 A.M., 3:35, 5:35 P.M. Sundays,
9 A.M.

Col. Pt. & Whitestone, 7:35, 8:45, 10, 11:25 A.M.,
2:25, 3:35, 4:35, 6, 6:35, 7, 7:35, 8:45, 10:45 P.M.,
12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M.
Fishing, 6:25, 7:35, 8:45, 10, 11:25 A.M., 2:25, 3:35,
4:35, 5:35, 6, 6:35, 7, 7:35, 8:45, 10:45 P.M., 12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 5:35, 7, 10 P.M.
For Rockaway, 8:25, 11 A.M., 4:35, 5:35, 7 P.M.,
Rockaway Beach, 11 A.M., 4:35 P.M. Sundays, 9 A.M.
and 6:35 P.M.

Gr. Cove, 9:30, 10:35, 11:25 A.M., 4:35, 5:35, 6:35 P.M.
Saturday nights, 12:15. Sundays, 9:35 A.M., 5:35 P.M.

Garden City, Queens and Hempstead, 8, 10 A.M.,
1:35, 5:35, 7, 10 P.M. For Flatbush, 7 P.M., 9 P.M.,
daily, except Sunday, and from Hunter's Point,
Monday, Wed., Fri. and Saturday, 12:15 night.

Wednesday and Sunday only to Flatbush Av.
10 P.M. Sunday, 9 A.M., 1:35, 5:35 P.M.

Gen. Cove, Locust Valley, Glen Head and Ros-
lyn, 8, 10 A.M., 3:35, 4:35, 5:35, 6:35 P.M. Sundays, 9
A.M., 6:35 P.M.

Greenport and Sag Harbor, 8 A.M., 5:35 P.M.
Huntington and Northport, 9, 10 A.M., 3:35, 6:35
P.M. Sundays, 9 A.M., 6:35 P.M.

Lakeland and Farmingdale, 8 A.M., 3:35, 5:35 P.M.
Port Jefferson, 10, 11 A.M., 1:35, 5:35 P.M. Sundays, 9 A.M.,
Pacheco, 5:35 A.M., 4:35, 5:35 P.M. Sundays, 9
A.M.

Highland Hill, Glendale, 8:35, 11 A.M., 3:35, 4:35,
5:35, 6 P.M. Monday, Wednesday, Friday and
Saturday nights, 12:15. Sundays, 9 A.M., 6:35 P.M.

Crotona Park, 10:35 P.M. For Flatbush, 7 P.M., 9 P.M.,
daily, except Sunday, and from Hunter's Point,
Monday, Wed., Fri. and Saturday, 12:15 night.

For H.T. & W. L. ST. ANNEX—Leave
10:25, 11 A.M., 3:10, 4:10, 5:10, 6:10 P.M. For fur-
ther information, tickets, communication, etc.,
apply at H.T. & W. L. ST. ANNEX, 125 Broadway, N.Y.

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NOT "CLUB GRADES" OR "SPECIAL GRADES,"

But genuine weapons, bearing the maker's full name and address, at a reduc-
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ever before offered such a line of superb

GUNS FOR FIELD SHOOTING,
GUNS FOR DUCK SHOOTING,
GUNS FOR GOOSE SHOOTING,
GUNS FOR TRAP SHOOTING,
AT SUCH PRICES!

LOT A.

FOUR JAMES PURDEY'S HIGHEST QUALITY.

Top lever, double bolt, bar rebounding locks, Da-
mascus barrels, finest finish throughout.
No. 2, 10 bore, 31 inch, 5 1/2 lbs. \$375
No. 3, 12 bore, 30 inch, 7 lbs. 335
No. 4, " 7 1/2 lbs. 335
No. 5, " 6 1/2 lbs. 335

All these guns in best

ENGLISH SOLE-LEATHER CASES,
lined with billiard cloth, with implements complete.

LOT B.

FOUR W. & C. SCOTT & SON'S PREMIER QUALITY.

Top lever, double bolt, extension rib, bar re-
bounding double notch locks, pistol grip stock,
horn heel piece; solid gold name plate, Damascus
barrels, choke bored; in English sole-leather
case, lined with billiard cloth, with canvas cover
over case.

No. 6, 12 bore, 30 inch, 9 lbs. \$199
No. 7, " 9 1/2 lbs. 199
No. 8, " 9 1/2 lbs. 195
No. 9, 10 bore, " 10 1/2 lbs. 200

LOT C.

FOUR W. & C. SCOTT & SON.

Quality next Premier. Made to special order by
W. & C. Scott & Son for Jos. Butler & Co., and are
so marked on lock plates, but have W. & C. Scott &
Son stamped on body of action, and are equal to
the Premier quality, except not so highly engraved.
Top lever, double bolt, extension rib, horn heel piece,
solid gold name plate, Damascus barrels, in best
English sole-leather case, with tan canvas
cover over case.

No. 10, 12 bore, 30 inch, 8 1/2 lbs. \$150
No. 11, " 8 1/2 lbs. 150
No. 12, " 8 1/2 lbs. 150
No. 13, " 9 lbs. 160

LOT D.

SIX W. & C. SCOTT & SON.

Top lever, double bolt, bar rebounding locks,
Scott's patent compensating lump, scroll fence per-
cussion, fine laminated steel barrels, handsome
dark stocks, with horn heel plate, handsomely en-
graved and finished.

No. 14, 12 bore, 30 inch, 7 1/2 lbs. \$100
No. 15, " 8 lbs. 100
No. 16, " 8 1/2 lbs. 100
No. 17, 10 bore, 32 inch, 9 lbs. 105
No. 18, " 9 1/2 lbs. 105
No. 19, " 20 inch, 9 1/2 lbs. 105

These guns in Lot D must not be confused with
Scott's "special" and other cheap qualities, as
they are in every way superior to the cheaper made
guns of the present time, having compensating
lumps and better material in every way. The
former price was \$225.

LOT E.

ONE W. & C. SCOTT & SON.

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FOREST AND STREAM

ROD AND GUN

THE AMERICAN SPORTSMAN'S JOURNAL.

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THE FOOD OF YOUNG FISHES.

WE print this week, in the proceedings of the Central Fishcultural Society, a paper with the above heading from the pen of Prof. S. A. Forbes, of the Illinois State Laboratory of Natural History at Normal, to which we commend the attention of all thinking fishculturists. It is not enough to stock streams and lakes with fish in a promiscuous manner, trusting to their getting a living "out of the water." In the near future fish culture and science will go hand in hand, and the fishculturist who best understands his business will be he who follows up all the side branches and knows what influences are brought to bear upon success, or the reverse.

Prof. Forbes' investigations have been made in a hitherto untrodden field, and if they are not complete, or if but few individuals of a species, genus or even family have been examined, it must be remembered that he has just begun. His valuable work on the food of birds and insects has been recognized as of value, and his work is bound to be of practical benefit to agriculturists and others, as we predict it will be to fishculturists. He is not a fishculturist, nor a farmer, but a man of science, pure and simple, who works for knowledge for knowledge's sake, and it is for practical men to apply his discoveries. He joined the fishcultural society merely to be of use to it—it is of little use to him—and we hope that his work will bring him the only reward he expects—the appreciation of those for whom he works.

The great struggle for existence, as all fishculturists know, is in the early life of the fish, and here Prof. Forbes shows that fishes whose food is widely different in adult life feed on nearly the same food in their infantile period. Who imagined that a sucker ever competed with a gar for its food? And yet it seems that the young gar feeds upon those bug or shrimp-like forms upon which the adult sucker lives. And so with other fishes of whom some have said their presence does no harm, but which, from the light shed by the paper in question, we incline to think that the good they do by serving as food when older may be more than compensated for by their presence in their younger days.

It is too soon to draw positive conclusions on this subject, which is a vast one, including the struggle for existence and the survival of the fittest, *i. e.*, the one which gets the most food, but it is a beginning, and we hope that this work will continue until we have as full and complete knowledge on the subject of fish food in the dawn of fish life as well as in the adult stage, and the intelligent fishculturist be able to know how to balance the value of fish life and to form an idea whether the food which the young suckers furnish his trout is all clear gain when bred in his ponds, or whether the minute animal life devoured by them does not deprive his troutlets of a needed article of diet worth more than the food the adult trout get.

The paper makes no claim to be more than a record of what little has been done, but contains many germs of thought for the practical man, and we would call special attention to the last three paragraphs of the paper as of especial importance.

HARD TIMES FOR THE QUAIL.

THE heavy snow and bitter cold of the past week will make sportsmen tremble for the fate of the quail. The earth is covered with a thick mantle of snow, which effectually prevents the birds from reaching the food on the ground, and all that they now have to depend on are the few buds and berries that they can obtain from the trees and berries, and such seeds as are left on the tall weeds that still project above the deep snow. At such a time as this the sympathies of all are felt for the birds, and unless these sympathies take some active shape the prospects for shooting next fall are by no means encouraging. Every sportsman who is so situated as to be able to give assistance to the half-starved bevies should now do what he can to keep the birds alive through this terrible weather. It is food that they especially need, for as long as their bellies are full they can withstand the cold. We killed birds about the middle of December which were, it seemed to us, as large and as fat as any we had ever seen. They were then well prepared to endure the hardships which were in store for them. But under the stress of such snows and cold as we are now having their surplus fat must soon disappear, and unless the ground becomes bare large

numbers must perish of hunger. The man who killed a quail December 31 found it, we venture to say, a very much lighter bird than those captured two weeks earlier. No one should shoot the birds in this weather.

In an editorial in *FOREST AND STREAM*, published four years since, we advocated the feeding by sportsmen and farmers of the game birds, which, during severe seasons, have so much to contend against. Some of the remarks are so applicable to the present situation that we transcribe them almost without change:

The question now arises: Can we not alleviate their sufferings and save some of their lives? The baiting of game has long been practiced for purposes of capture, and with just as small trouble and expense the quail may be fed and saved through this severe weather. On the afternoon of the 30th ult. we flushed a bevy of twenty individuals. Having secured one bird, and finding it unfit to eat on account of its emaciated condition, we desisted from following the bevy. If these birds are saved through the winter there will be, say, eight pairs breeding next spring. Quail will, on an average, raise twenty birds in a season to the pair, there being two nests of eggs of about fifteen each. The eight pair will give in this way 160 birds, or about eight bevies in the following fall. This rate of increase is not placed at too high a figure.

Weather like this will account for the alternating scarcity and plenty of birds in different years. But it seems to us that a great many quail could be preserved through the winter if those interested would make an effort in this direction. A spot should be cleared at the border of some swamp which the quail are likely to frequent for food or shelter. On this clearing, buckwheat, corn, oats, or the screenings of wheat and rye should be scattered, together with hay and hayseed; leading from this in various directions grain should be sparsely scattered to some distance, forming paths, which the birds coming upon will follow up. During the weather that is now upon us quail are forced to travel over a great deal of ground to find a living. As soon as the baiting place is discovered they will remain near by until long after the supply of food is exhausted, and if it is occasionally replenished they will settle in the immediate locality, and probably breed near by in the spring; one would be surprised to know how little the birds can eat and yet live. We must exercise foresight and take a little trouble in this matter, and those of us who love the golden days of October, and their accompanying delights with dog and gun, should try now to help the quail survive the rigors of these latter winter months.

THE UNITED STATES FISH COMMISSION REPORT FOR 1878.

ANOTHER large volume is added to the valuable literature of American fishes and fish culture, making the sixth of the series, in the report now before us, whose title page merely gives the lines "Inquiry into the Decrease of Food-Fishes," and "The Propagation of Food-Fishes in the Waters of the United States," as a key to its contents, which are so varied as to include, in the appendices, many subjects either under or related to these headings.

The report proper includes an account of the operations of the United States Fish Commission for the year 1878, although the work on the salmon extends to the disposition of the fish in the following spring. The work of inquiry into the decrease, and research into the character of fishes was placed in charge of Prof. G. Brown Goode, assisted by Dr. Tarleton H. Bean; the collection and investigation of marine invertebrates by Prof. A. E. Verrill, assisted by Mr. Richard Rathbun, Mr. Sanderson Smith and Mr. Warren Upham. The propagation of food-fishes was under the superintendence of the late Prof. James W. Milner, assistant commissioner, aided by Frank N. Clark and Mr. T. B. Ferguson.

The fact that the beam-trawl, which is the main reliance of the English coast fishermen, is practically unknown on our coast as a means of taking the bottom fishes, is referred to and a belief expressed that its introduction would add to our facilities for procuring food all along our sandy coast south of Cape Cod; and attention is called to the fact that in the Loffoden Islands cod are taken in gill-nets, whereby the expense of bait and the vast amount of labor expended in securing it is saved. The Commissioner recommends the establishment, either by the General Government or in connection with the States, of a thoroughly reliable and exhaustive system of recording fishery statistics for the future, to be combined annually and published by some of the public departments of the government, as it is very difficult to establish data upon facts furnished by one State, and it is only by considering the subject in its relations to the whole country

FOREST AND STREAM.

NEW YORK, THURSDAY, JANUARY 6, 1881.

. The FOREST AND STREAM goes to press Wednesday. Correspondents are requested to mail their communications so that they may reach us before that day.

The Annual Session for 1881 of the Michigan Sportsmen's Association will be held at Lansing, beginning Jan. 25.

IT GIVES US MUCH PLEASURE to present to our readers this week, from advance sheets, one of the chapters of a new book by Mr. T. S. Van Dyke, on sport in California. Those who are acquainted with his numerous contributions to the *FOREST AND STREAM* need no assurance that Mr. Van Dyke knows his subject thoroughly, and the chapter published by us is sufficient earnest of a most readable book. We shall notice the volume as it deserves, immediately upon its appearance.

SQUIRREL SHOOTING is not by any means the highest refinement of sport, but there is something about it that does have more of a charm than any other shooting—and that is the recollections it brings of the days when squirrel shooting, like every other sport, was the best—the days when we were boys. Something of how these memories cling in after life is shown in the pleasant letter on the subject on another page, written by a long-time correspondent, and one of the staunchest of the many thousands of friends of the *FOREST AND STREAM*.

THE GULL ISLAND CLUB.—With the exception of Capt. Johnson, who still remains at the club house, all the members of the Gull Island Club have returned from their trip to Pimlico Sound. Messrs. B. Payne, Thos. Hall and Al. Heritage came back a week ago; F. Harrison and R. Hinich followed a few days later, and the rear was brought up by N. E. Nash, F. M. Thomson, E. Wright and G. B. Eaton. The pleasure of the trip was somewhat marred by the tempestuous weather which has prevailed on the Atlantic coast for a fortnight past; but the Jersey boys report themselves well pleased with their adventures. We have a full account of the doings of the club, from the pen of "Jacobstaff," which will be published next week. Messrs. N. S. Nash, D. Tolley and Al. Heritage will probably return to the shooting grounds in the latter part of this month.

that an equitable system of legislation can be made concerning close seasons, the size of fish to be caught, the enforced use of fishways, regulations pertaining to the pollution of waters, etc.

The season of 1878 proved to be the most productive, so far, in the history of the U. S. salmon-breeding ranch on the McCloud River, California, the superintendent, Mr. Stone, estimating that 18,000,000 eggs could have been secured if they had been required, but the take was limited to the number applied for by the State Commissioners and others. The first eggs were taken August 20, and from that date until October 5, when the last car was loaded, the men were very busy, from seven to nine thousand salmon were several times taken in a single day, and two cars were loaded with eggs, one with 4,000,000 and the other with 3,250,000, while 2,500,000 were hatched and planted in the river. Mr. Stone also hatched 1,203,000 at the Clakamas station, on the river of that name, which is tributary to the Columbia, and turned them out there.

Of the station for hatching the Atlantic salmon at Bucksport, Me., in charge of Mr. Atkins, it is recorded that each fish, after being stripped, is labelled by a metallic tag with an identifying number upon it, which is recorded with the date of capture, weight before spawning, weight of eggs taken, etc. Mr. Atkins has in several instances captured these fish a second time. One instance is as follows: No. 769, stripped on Nov. 1, 1875, weighed 21 lbs. 7 oz., and yielded 5 lbs. 7 oz. of eggs; when turned back it weighed 15 lbs. The same fish was recaptured at Lincolnville, Me., June 14, 1877, weighing 26 lbs. Another fish, No. 1,010, which, on the 9th of Nov., 1875, weighed 18 lbs. 2 oz., had 4 lbs. 10 oz. of eggs, and when dismissed weighed 13½ lbs., was retaken June 13, 1877, weighing 30½ lbs., showing an increase of 12½ lbs. in two years. Very encouraging reports of increased catches of salmon in Maine rivers have been received, and large numbers have gone up the fishway at Lowell. The winnini, called also "schoodic" and "land locked salmon," has also been bred in limited quantities by Mr. Atkins at Grand Lake Stream, Me., for the General Government in connection with the States of Maine, Massachusetts, New Hampshire and Connecticut, a total number of eggs taken and distributed being 1,723,000, the parents being returned to the water uninjured.

There was also good success with whitefish (*Coregonus*) by Mr. Clark, and with shad by Messrs. Milner and Ferguson all the particulars of these, as with the salmon and other fishes, being found in special papers, by those in charge of the work, in the appendices.

Experiments at Gloucester, Mass., on the sea herring were satisfactorily conducted by Mr. Clark, also at Noman's Land by Mr. Vinal Edwards, so that it has been demonstrated that it is possible to increase this fish if thought necessary. The carp receives attention, of course, but our readers are familiar with the details of the propagation of this most valuable fish down to a later period than the report treats of.

The modes of increasing the supply of fish food are detailed; the history of fish culture, from the discoveries of Remy and Gehin in France to Garlick and Ackley in America, and the appointment of the Fish State Commissioners is glanced at, and the improved methods hinted at as subjects for future report. The appendices contain: "A List of Patents Issued in the United States, Great Britain and Canada, up to the end of 1878, Relating to Fish and the Methods, Products and Applications of the Fisheries." This includes fish hooks, fish traps, fishways, floats, harpoons and spears, nets and seines, oyster culture, pisciculture, reels, rods and sinkers, preservation of fish, paralyzing by electricity and manures, some of which are illustrated by figures. "Report on the Department of Fisheries in the World's Exposition in Philadelphia, 1876," by Joakim Andersen, translated from the Norwegian by H. Jacobson. "Report on the American Fisheries," by Frederick M. Wallem of Norway. "A Short Introduction to the Proper Care and Management of the Baltic Fishery," by H. Widegrin, of Norway. "The Salt Water Fisheries of Boluslaen and the Scientific Investigations of the Salt Water Fisheries," by Axel Vilhelm Ljungman, of Sweden. "The Great Boluslaen Herring Fisheries," by the same. "The Society for Promoting the Norwegian Fisheries," from the *Bergensposten*, a daily newspaper at Bergen, Norway. "Statistics of the Lofoden Fisheries for 1878," from the official report of the Superintendent. "Report on the Norwegian Deep-Sea Expedition of 1878," by Prof. G. O. Sars. "On the Scientific Investigation of the Baltic Sea and the German Ocean," by G. Karsten, translated by Dr. Oscar Loew.

Appendix E opens with a "Report on the Marine Isopoda of New England and Adjacent Waters," by Oscar Harger, which, with list of authorities quoted, covers 154 pages and is embellished with 91 figures. "Report on the Pterygonida of New England and Adjacent Waters," by Edmund B. Wilson, 42 pages and 42 figures. Appendix E has "The Enemies of Fish," by Baron de la Valette St. George, Professor of Anatomy and Director of the Anatomical Institute at Bonn, which was read before the German Fishery Association, Berlin. "The Purification of Refuse Water," by E. Reichardt, of Jena. "Notes on the Fungus Disease Affecting Salmon," by A. B. Stirling, Assistant Conservator of the Anatomical Museum of Dublin; also "Additional Observations on the Fungus Disease Affecting Salmon and Other Fish," by the same. "Sickness of the Gold Fish in the Royal Park, Berlin," from the *Deutsche Fischerei Zeitung*,

Stettin. "The Economic Value of the Norwegian Lakes and Rivers as a Field for Fish Culture," by N. Wergeland, of Norway. "What Does a Fish Cost," by Christian Wagner.

Appendix G has "The Propagation and Distribution of Shad in 1878," by James W. Milner. "Biological Observations made during the Artificial Raising of Herrings in the Western Baltic," by Dr. H. A. Meyer. "The Propagation and Growth of the Herring and Small-Herring, with Special Regard to the Coast of Bohuslaen," by A. V. Ljungman. "The Introduction and Culture of the Carp in California," by Robert A. Poppe. "On Carp Culture, Chiefly in its Relation to Agriculture," by Eben Bandtlen, read at a meeting of the Prussian Fishery Association at Elbing. "On the Carp Ponds of Nether Lusatia," by Dr. Edm. Veenckenstede. "The Carp Fisheries in the Pletz Lakes," from a Berlin paper. "Mr. Christian Wagner's Establishment for Raising Gold Fish, at Oldenburg, Germany," from the *Fischerei Zeitung*. "A Report on the History and Present Condition of the Shore Cod Fisheries of Cape Ann, Mass., together with Notes on the Natural History and Artificial Propagation of the Species," by R. L. Earll. "Report of Operations at the United States Salmon Hatching Station on the McCloud River, California, in 1878," by Livingston Stone. "Report on an Attempt to Collect Eggs of Sebago Salmon in 1878," by Charles G. Atkins. "Report on the Collection and Distribution of Schoodic Salmon Eggs in 1873-'79," by the same. "Do the Spawning Salmon Ascending the Sacramento River all die without returning to Sea?" by Horace D. Dunn, with notes by Livingston Stone. "Present Stage of the Salmon Experiment in Tasmania," by Morton Allport. "Correspondence Connected with the Transmission of Eggs of the Quinmat Salmon and Whitefish to Australia and New Zealand, 1877, 1878 and prior years." "Correspondence Connected with the Transmission of the Eggs of the Quinmat Salmon and other *Salmonidae* to European Countries in 1878 and prior years." "Summary of Reports for 1878, by State Fish Commissioners Respecting the Increase of Food-Fishes by Artificial Propagation." "Circap Fixtures for the Hatching of Salmon," by Charles G. Atkins, illustrated with 15 cuts, and, appendix II, "On the Nature of the Peculiar Reddening of Sailed Codfish during the Summer Season," by W. G. Farlow, M. D.

It will be seen that a variety of subjects are treated of in the appendices, which to do justice to would require them to be printed entire, but as all who take especial interest in these matters will obtain the volume and read the portions which interest them, we forbear giving more than the titles of the papers, hoping to refer to some of them again from time to time.

WHERE WE STAND.—For reasons, which seemed to us good and sufficient, we declined to publish a communication from Mr. M. P. McKoon, of Franklin, N. Y. Having so informed that gentleman, we are now in receipt of a letter from him, which contains the following extraordinary sentences:

"Now you doubtless know something of my financial circumstances, and how I became heir to my property, etc., and that I am not breeding dogs for a living by a long way. Now I have \$1,000 loose at present, and *would* if needed, spend in defense of our brothers and our case in this matter, and not bother me much either: and should you not publish the letter of mine I shall of course be obliged as a duty to expose you through the other sportsman's journals; and also in pamphlet form to every honest sportsman in the United States and Canada. I shall make a clean exposure of the whole thing from the time it first started. Now I certainly hope you will not oblige me to injure you in the matter, and upon your giving it a second thought I am certain you will publish them immediately and not curtail them at all."

Mr. McKoon has threatened the FOREST AND STREAM. We do not know anything about that gentleman personally, nor are we specially interested in his financial circumstances. It is, however, evident that he is somewhat irascible and disposed to jump at conclusions. Still we think that on consideration he will see that, in writing as he has, he has done a most foolish thing. Other people have once or twice tried threatening FOREST AND STREAM, and have discovered after a little while, somewhat to their surprise, that they had got hold of the wrong end of the stick. They found, when they attempted to coerce us by this means, that we did not care; that when we believed we were right we would go ahead in our course whether it pleased the parties interested or not. They found, in short, that the FOREST AND STREAM was being managed in the interests of sportsmen, man-fashion, and not merely in a politic way to try to curry favor with and cringe to everybody that chose to find fault with it. The FOREST AND STREAM is not to be dictated to. Its course is directed by an earnest desire to serve the best interests of the sportsmen of this country, and from this course it cannot be turned.

We have none but the kindest of feelings for Mr. McKoon, and we are not particularly disturbed by his threats. We would suggest, however, that it would be well for him to consider whether in attempting to dictate what shall appear in our columns he has not, in the rugged but forcible language of the Persian Sage, "bitten off more than he can chew."

The letter will not be published.

"Selago salmon." "Schoodic salmon" and "Land-locked salmon" refer to one fish, also called "Winnimish," or Quinimish, as some spell it. It is now called *Salmo salar* var. *Sebago* by ichthyologists.

The Sportsman Tourist.

THE LOG OF THE FAVORITE.

STEAMER FAVORITE,
CHATAM STRAITS, ALASKA, AUG. 26, 1880.

IN my last, from Pyramid Harbor, I promised to send you such extracts from the Favorite's log-book, as with variations, should seem most likely to prove interesting to my FOREST AND STREAM friends.

While still in the midst of the grand scenery and novel surroundings, which have during the last ten days furnished to me more new sensations than I had thought could ever again come to me, I will start the redemption of the promise. I find myself entranced at starting, with rich pictures, and undecided whether to leave the present for a future description, and, beginning systematically with my notes, avoid the risk of tautology, or to let the notes lie idle for a bit and trust to my surroundings for inspiration. For nearly a fortnight I have been cruising about in but slightly known waters, and have been enjoying the pleasures which are incidental to the exploration of hitherto almost, and in some cases, quite unknown country. We have steamed for miles into great bays, where by the charts dry land appears, and have tramped the beaches of islands and bayous, where, but for the knowledge thus obtained, I should have been justified in considering that no land existed.

I have been in pleasant and friendly contact with tribes of Indians, who, but a short time since, were supposed to be unsafe to venture among, and have in studying their customs employed my time pleasantly while our hydrographer, armed with sextant and compass, has made the pleasure profitable by securing for the future use of others the locations of these bays and islands, shoals, reefs and inlets.

I have gazed until fairly satiated upon magnificent scenery made up of great mountains such as Fairweather, Perouse and Crillon, all over fifteen thousand feet in height, rearing their eternally snow-crowned heads and shoulders from foot-hills which are most justly named "Alps," for as far as the eye can reach they furnish a horizon from six to ten thousand feet above the sea; upon glaciers of the most majestic proportions and of bewildering variety of form and hue; and upon great icebergs which, becoming detached from the advanced foot of these glaciers, drop into the sea and go solemnly drifting to and fro with each change of tide, hemmed in by the precipitous shores of Cross Sound and Icy Straits, upon whose benches in certain bays they stop at times to rest at high tide, and remain there slowly yielding to the influence of the sun's rays until, with the dense green background of fir forest, they resemble, especially by moonlight, cities of ruined marble palaces.

But for these glaciers we of the Favorite would have been unquestionably the discoverers as well as explorers and surveyors of unknown bays, but they had drawn to their vicinity that mighty Nimrod in glacier hunting, Professor John Muir, of whose previous visit to and sojourn among the ice rivers, the Indians told me.

A visit to this strange country would be worth all it would cost to those who have already exhausted the resources nearer home.

At times the sensations are decidedly exciting, for instance when from two or three directions at once great icebergs come drifting toward you, and the problem which way to steer presents itself; for of the two, in case of collision, the best way would be sure to get the best of it, and seeing as they do far below the surface, and in different directions, they are affected by eddies and currents, which present no surface indications. Then shoal water is the refuge, for the least of the dangerous bergs would ground sooner than our little steamer.

Until very lately the interior of Alaska has been a "terra incognita." Spasmodic attempts have been made by missionaries, miners and traders to effect an entry, but all have returned disgusted by failure. Along the coast are bays and harbors occupied by villages and hamlets of warlike coast tribes who have for ages claimed as their right—to be maintained, if necessary, by force of arms—the trade with the tribes (the Sticks) who inhabit the interior, and whose industry consists in the capture of the fur-bearing animals, whose pelts are by the coast Indians, purchased for oil, dried fish, and a portion of such groceries and dry goods as they may obtain, or expect to, from the white traders to whom they sell them.

These tribes, the Hoo-nahs, Takus, Sum-dums, Koot-nooks, Chilcats and Chilcoots, have stood sentry over the portals, and "thus far shall thou come and no further" was the rule, and the coming thus far was attended by difficulties and dangers which deterred all but the most enterprising and courageous. But this state of affairs has, I trust, been permanently changed for the better—better for the whites and the Indians; the doors have been opened, and at this date miners and prospectors are distributed throughout the country searching for precious metals, which rumor has asserted were to be found there. Missionaries are working their way in, establishing schools at each outpost to which the Indian parents gladly send their children, and a small unarmed trading steamer cruises about in perfect safety and is welcomed at each village as a returned friend. To the traders, however, the welcome reaches no further than to the door.

The existence of the coast is not deficient in shrewdness, and they fully appreciate the value of a monopoly.

I'll begin that log:

SITKA, AUGUST 14, 1880.

Reports that the Sim-Sims, who are English Indians from Port Simpson, were trespassing upon the sea-otter hunting grounds of the Hoo-nahs, who are Alaska Indians, and that a war between the two tribes was imminent; also that throughout the inland waters illegal traffic in spirits and firearms was taking place, and much smuggling going on, and that at various localities on the coast slight troubles were springing up, which vigorous steps would check, but which, if allowed to increase, would involve seriously the safety of the few whites who are strolling about Alaska, induced Major Morris and myself to pay a visit to these various places and give to the Indians a little advice and instruction, which, if heeded, would greatly decrease the dangers to the pioneers, and would save also the lives of the Government men.

The only means of transportation that we could obtain was the Favorite, which little steamer I described in my last. At 10 A. M. of the 14th, with flags and pennant proclaiming her new character, and amid the cheers of the male and handkerchief salutes of the female population, the Favorite steamed out of Sitka harbor on a mission which to every one in Sitka was of greatest importance. The weather was bright, but darkened as we passed through Olga and Nevski Straits, and

about "quitting," and was preparing to suit the action to the word, when another arrow speared gayly from the string, and Mortality knocked at the lattice-door of his little ribs in a way that invited an immediate response.

An arrow that scattered the pine-needles among the rest of the flock caused a decided increase in their pace, and as shaft after shaft, flying wild from the archer's now trembling hand, hissed over the birds or scattered the dirt around them, they broke into a run and some flew a few yards, alighted, and then ran again.

"Now we shall have to scatter them," said Belville. "You had better keep quiet and let me do it. Hold 'Prince back.'" Belville started on a run after the birds, while Norton, exultant Prince and tried to hold him. He discoursed most touching strains "to the rocks and rills, touching the tender stops of various quills," as his master ran ahead without him. The quails quickened their pace as Belville charged on them, and stuck to their legs with provoking pertinacity for a few moments, until Belville made a "spurt" and got within ten paces of them, when suddenly the air was filled with buzzing wings and wheeling and darting streaks of blue, white and cinnamon. Quickly his gun came to his shoulder, and he covered the dark green shrubbery of a *manzanita* behind which a bird had flown. The gun cracked; a shower of blue and cinnamon feathers puffed out from behind the bush; a dull sound of a falling body was heard; and Norton lay prone upon the earth!

As he picked himself up and brushed the pine-needles out of his sleeves, he announced to the universe at large his intentions of subduing all future contracts to hold a dog while his master goes dead to shoot.

"Prince didn't seem at all inclined to object to this arrangement, but displayed remarkable quinnity as, nearly wagging his tail off, he went in to pick up the fallen bird. He then trotted away over the ground ahead with his nose in the air and his tail vigorously whipping his sides. He had not gone a hundred yards when his pace slackened. So did his tail. The tail got slower in motion. So did the legs. The legs seemed to slacken the tail and the tail to react upon the legs, until he had settled down to a pace suitable for a fashionable mourner at a snail's funeral. Then he stopped altogether, stood for a minute with his eager eyes fixed in a stony gaze; then, turning his head, he glanced at his master. "Come on quick, now, with your guns," said Belville. "These birds do not die long."

As Norton came up, three birds rose from the dead brush ahead of Prince, and almost at the first buzz of their wings his gun went off. Then the rain of a flourishing young *manzanita* about three feet to one side of them. One of the birds went to Belville's side and came whirling down out of a shower of feathers, while another plunged like a wet rag into a pile of rocks at the crack of the second barrel. The birds were soon picked up and the dog sent on.

He at once began to stiffen and crawl, sniffling the air and straightening out occasionally into a dead point. But no birds rose.

"Too slow for these chaps, Prince. You will have to go faster," said Belville, as he started ahead of the dog on a rapid walk. "Heie on! boy, or you'll get left!"

But Prince had not been trained upon California quails, and followed along behind as if he had a bag of shot on each foot and his tail was spliced with a poker. By running and clearing him on, Belville soon got him pretty well stirred up, and he overtook a little bunch of birds that had hidden in a fallen tree-top, where they saw him coming. Belville went to each side of the tree and Norton and his sister to the other, while Mrs. Norton was to look for the game and flush it with an arrow when visible. Carefully she looked into the brush, but there was no sound or sign of life for two or three minutes; then Laura suddenly drew back, and with a vigorous pull at the bow-string sank an arrow half way to the feathers in the white and brown udder on a rotten stump beneath the brush.

"Quinnity," was heard within, and Prince, who had been standing off at some distance ran close up, turned his head to one side, crouched low, and, looking intensely anxious, settled down still as marble.

Belville kicked upon the opposite side, and out came four birds, whizzing in various directions. One came down before the combined effect of a heavy battery opened by Norton and his sister, and another's machinery was deranged by a shot from Belville.

These birds were soon picked up, and the hunters started for the rest of the covey, the trail of which the dog soon struck. But Norton and the ladies were unable to follow at the rate required to overtake them with the start they had now gained, and Belville went swiftly on alone.

NOTE.—The mountain quail of the Pacific slope seems to be little known to sportsmen. I have made some very absurd statements about it by those who have attempted to describe it.

It is not "twice as large as Bob White."
It is not "very time eating."
It is not "extremely rare."
It is not "extremely wild and difficult to shoot."
It is not "found only in the roughest or most inaccessible places."
It does not "run faster than the valley quail."

I am fully aware that I have made a far better subject for a good chapter if these things had been true. But while not averse to good subjects, my main object is accuracy, and I describe these birds just as I have found them.

I have seen them only in their natural state, and not as they must become if much hunted. But I have not only hunted them with a shot-gun, but have time and again met them when deer-hunting, and have sat down and watched them until the last one had been softly away. I have seen them often so close and unafraid that a good archer could kill him a dozen with a bow, and it is no trick for a good rifleman to decapitate three or four before they leave. I do not know what they may be in the North; but in Southern California, when not hunted, they are the very embodiment of guinea-fowl simplicity.

Coming to fuller feathers, this bird looks much larger than Bob White, but is only a mere trifle larger in body, at all. In flavor it is almost exactly like the valley quail, which is almost equal to a tolerable game of chicken. Though by no means plenty, it is not *exceedingly* rare. It is not so common as the mountain quail, but it is no trick for a good rifleman to decapitate three or four before they leave. I do not know what they may be in the North; but in Southern California, when not hunted, they are the very embodiment of guinea-fowl simplicity.

It is not quite so swift as the valley quail, although swift enough. I have found it in good easy ground to shoot, though it generally likes rougher ground than the valley quail. I have found it at altitudes as low as one thousand feet above the sea; though I believe these were the increase of escaped tame ones. Its habitat seems to be above four thousand feet.

It does not run as fast as the valley quail, though it will depend upon running much longer, and is much harder to force into flight. It is very easily domesticated and makes a charming pet, though I do not know whether it will breed in confinement.

When the brain is wearied, the nerves unstrung, the muscles weak, use Hop Ditters.

Natural History.

DOMESTICATING QUAIL.

INFLUENCE OF THE LAWS OF HEREDITY.

Editor Forest and Stream:

I have taken great interest in all the articles I have read in your valuable paper on the various experiments at domesticating the American quail—Bob White, as he is familiarly called from Maine to Texas. I have hoped some one would appreciate the importance of the matters and study into the principal difficulties to be overcome, and give us directions in full for bringing to a successful issue this most interesting effort to add to our list of home pets the beautiful bird so universally adored.

I have given the matter much thought, and am fully determined to make the experiment so soon as I can arrange to make a fair trial. In the meantime I hope others will make the trial, and by mutual aid it may surely become a success, and if we can obtain a "strain" of fully domesticated quail that will live with our chickens and doves we shall add a very important and valuable member to our list. And the remuneration, aside from the satisfaction, may be well worth the effort. For I believe the demand would be unlimited for a great many years at highly profitable prices.

In many cases the effort to tame one or more specimens has been successful for one season. It has also been well established that quail may be kept under control and yet produce eggs and young, but I have found no well authenticated cases of raising any of the second generation.

Now all that I believe to be necessary is to raise and keep the birds under control for three to four generations, by which time the inherited wild instinct will be replaced by an inherited tame instinct. As bearing on this point let us note some of the facts in regard to the laws of heredity among other birds and animals.

Those who have repeatedly raised and kept a race of wild turkeys tell me that birds hatched from the eggs of wild turkeys inherit so much of the wild nature that it is almost impossible to keep them during the first generation. That it is necessary to have parents of the flock raised from tame eggs and then to watch most carefully against their getting into the forest. That if they do get into the woods and roost out one or two nights they are gone birds from that time, and refuse to come or be driven back to a tame life, and in a few days are as shy and crafty as birds born and reared in a wild state. But if kept carefully about the premises with tame fowls, they will remain partly tame. When nesting time comes the wild instinct again shows itself in the effort to wander off and secrete the nest. This is manifested properly and the eggs of this half-tamed bird are hatched by a tame turkey, the second generation are much less like wild birds, and so by the third or fourth generation they become like any tame turkey in habits and life. It is also stated that birds that are half-bred from one wild parent of the first generation show unmistakable signs of inheriting the wild instinct of their parent, and need to be very carefully watched to prevent their lapsing into the wild state.

The same experience has been met by those who have tried to domesticate the wild goose or the mallard duck from wild eggs. The first generation of these birds retain their wild nature, and in autumn show the strong migratory instinct inherited from their parents. But if kept under control and their progeny raised, by the second or third generation the nature is entirely changed, and tameness and dependence on the master, man, is at last fully established.

We see the same power of heredity among many of our animals. Notably, the characteristics of the mustang horse shows in the bucking propensity of his posterity to quite remote generations, and is even inherited by the mule which has any trace of mustang blood.

Livingstone Stone has noticed the fact that trout fry hatched from tame trout spawn are less shy than those from wild trout. So we might go on citing many cases among all kinds of animals, where the inherited traits are entirely modified by a few generations of hereditary habits, and it is not at all likely that the quail will prove any exception. But all we know of his habits under tame conditions lead to the conclusion that by persevering in keeping him under our care and protection for two or three or more generations, we may fully and completely change all his wildness into the most perfect tameness and dependence on his humane protector and provider.

If not trespassing too much on time and space I would suggest a few most important features to be observed in keeping old or young in partial confinement.

They should have a mixed diet of seeds, green herbs and worms, or other kinds of animal food, and at or before the mating season should not be allowed to become too fat. They should have all the exercise possible. To this end I would arrange to partially cover and scatter their food, so they should have to scratch and hunt for it. A long movable yard could be prepared of wire-screen fencing which could be moved from place to place. Most of such details would suggest themselves to those who may be induced to try this experiment.

If any have made the trial, or think of doing so, I shall be pleased to hear from them through these columns.

St. Joe, Mich.

HABITS OF SNAKES.

WHITWATER, WIS., Dec. 23.

Editor Forest and Stream:

I have read with much interest the various articles in your paper about snakes eating fish, as I have myself witnessed some such incidents as have been reported to you.

About twelve miles from the mouth of Lake Koshkonong, an expansion of the Fox River, the lake is ten miles by four in its largest dimensions, and is known as the greatest resort for canvas-back and other ducks in the West. It also is well stocked with fish: wail-eyed pike, "pickercil" and several varieties of bass, being the most numerous. I belong to a club of fifteen, who spend the first week of June in each year, camping on the shore of this lake. We call ourselves "Fin-Hunters," and we never fail to have a happy time, getting, during our fishing, the lake, and engaging in various recreations on shore. The bank on which we camp is probably twenty-five feet high, and a spring of cold water can be made any where by digging in the gravel at its foot. When we first put up our tents we dig a spring to supply the camp with water, and another at suitable distance, much broader and quite as deep, in which to put our

live fish as we come in from trolling. This last spring soon becomes a great resort for striped and water snakes, and I have repeatedly seen both varieties in the water after dead or dying fish. As the snakes were usually small, and the fish of fair size, the former would not be able to do more than seize hold of the fish and "swallow" it bareheaded at the gills.

Last June one of our number threw a small pickercil, about ten inches long, on the gravel by the boat landing. A few hours afterward a water snake was discovered trying to swallow the fish. The snake was nearly three times as long as the fish, but not as thick though. A crowd of us gathered around and watched the proceedings. The snake seemed not at all embarrassed, but kept diligently at its task, pushing forward its head just as the other, and at times rolling itself and the pickercil completely over. It had not the fish more than a third down, and betrays began to turn in its favor, when suddenly it stopped, rapidly disgorged the pickercil and hurried off to the water. This was the general opinion that the snake had become alarmed at the demonstration of its conspiracy; also that it would have succeeded in swallowing the pickercil if it had not been disturbed. The relative size of the fish and the snake does not seem to be regarded by the latter. Capt. Frank Lester, one of our most successful proprietors of the famous "Scoutenabiquon" steamer, of Madison, told me once that he came in at Lake Koshkonong one day with a string of bass. He threw them out ahead of him on the bank. When he had landed he saw a little snake, not over a foot long, which had seized the jaw of a three-pound bass and was making most desperate efforts to drag it off. The snake wobbled with its tail among the small gravel stones, and the crowd, would pull them in toward the fish. I am inclined to think that snakes treat fish to pieces that are too large for them to swallow. I do not think that they feed on decayed fish—at least I have never seen them do so. Turtles, however, are perfect scavengers, and devour anything from a live fish on a set line to one dead and far gone as to shine in the sunlight.

LAKESHORE, CONN., Dec. 17.
In your issue of Dec. 9 I saw a call for information in regard to snakes swallowing their young. I gladly respond to the call and hope all others will who have any information on the subject.

When I was a boy, one day working in the hay field, I killed a striped snake of the (to me) unusual length of three and one-half feet. I killed it by thrusting a pitchfork through its head when I held it up for the other workmen to see something new to present to the crowd. I took the tail, and upon laying it down upon the ground it began to run back toward the head. My curiosity was excited to know what it was in the snake, so I took it up to the house, which was near by, cut the snake open and found inside of it forty-nine young snakes, about six inches long. They were all fully formed and as perfect snakes as the old one, but they were all dead, and I suppose they died from suffocation, as the supply of air had been cut off from the time I thrust the fork through her head until I opened her, which was about an hour and a half. The cavity in which the young snakes lay was dry, smooth and clean, the intestines lay outside of this sac or pipe and between it and the body of the snake. I did not see the old one swallow the young ones, but found them, not in the stomach of the old one, but in a cavity evidently formed for that purpose.

But here another link in the chain of evidence. My wife (who by the way is the "Ruth" who gave me and the rest of our club such a showing up in the Forest and Stream, some time since and had so much trouble with my first pup, was one day picking strawberries near a sandy knoll, where she discovered a striped snake with several young ones on the sand near her. When she approached them the old snake opened her mouth and the young ones immediately crawled in, one after another, and disappeared.

So, taking these circumstances together, I came to the conclusion that striped snakes were provided with a cavity in their bodies to which the young retire for safety in times of danger.

HEMATITE.

NASHUA, N. H., Dec. 27.—When a boy I have often killed common striped snakes, whose bodies contained a large number of young ones from one to two inches long. I distinctly remember one occasion, when on my way to school, I killed a snake about four feet long and uncommonly thick, from the body of which I took forty-seven young ones. A. W.

SHARKS SWALLOWING THEIR YOUNG.—*Charlestown, Va. Nov. 5.* In your issue of the 23rd ult. I noticed an article on the question of sharks swallowing their young. I think I can throw some light on this curious subject, which I give for what it is worth.

While attached to the United States fleet of war Vincennes, on the coast of Africa in 1858, I witnessed the capture of a shark some six or eight feet long. It was suspended from the bowsprit and tipped over by one of the crew. Twelve young sharks about two feet long followed the knife, fell into the sea and swam off with as much apparent indifference as if nothing wonderful had occurred. Expressing surprise at this strange sight I was informed by an old quartermaster standing near, whose word I never had cause to question, that he had often seen young sharks swallowed by the old ones and again disgorged.

From what I saw and heard on this occasion I am satisfied that this old shark swallowed the young for protection.

JOHN THOMAS.

Medical Director, U. S. N.

CHICKENS RETURNING TO A WILD STATE.—*Cortland, N. Y., Dec. 27.*—In looking over a poultry journal I noticed an account of wild chickens that are hunted as wild game in Comanche County, Texas. It was stated that a few years ago large numbers of domestic chickens were deserted for some reason by their owners, when they took to the brush, and the woods are now full of them. This reminds me of the somewhat novel experience—as related by myself—of a gentleman with whom I was out shooting partridges a few weeks since. Coming into a piece of woods, he made the remark that it was in this very same place that he last fall shot wild chickens. It seems that a white Leghorn hen belonging to a farmer, whose henery was near by, had stolen her nest, going into the woods, and hatching out a brood of chickens. The hen and chickens came to the house a few times and were fed, but finally remained in the brush or flying in the trees when any one approached. The farmer not owning or caring to use a gun, my friend was asked to hunt them down, which he did, shooting five of them out of the trees. They were, as he expressed it, "as wild as hawks." It may be that the common breeds of poultry would have remained

tain, "as my experience goes to show that there is no variety of food as the Leghorn.

CANVAS BACKS IN RHODE ISLAND.—*Boston, Dec. 24.*—As I am under the impression that a canvas-back duck is a rare bird in New England, permit me to record the killing of two of them. Myself and Mr. Ellerton Lodge of this city were shooting at Point Judith during the first cold snap of November, and one morning I floated down on four large ducks, getting within easy shot, but unluckily my trigger finger was so numb that both barrels of my gun went off before I knew it, and away went the birds. Fortunately they flew by Mr. L., who had the honor of knocking over two of them. To my surprise I found them to be genuine canvas-backs. They seemed oblivious to any danger, allowing me to get within forty yards when I drifted on them. Is this not unusual with them?

FRED K. SKINNER.

The canvas-back is not common on the New England coast, but we believe that a few are occasionally shot on the eastern shore of Connecticut.

A THREE-LEGGED HEN.—The following curious story comes to us from the *Reliance* (N. C.) *News* of Dec. 15:

Mr. John Stone, of Franklin County, has presented Dr. Blackwell with a wonderful three-legged chicken, which is certainly a curiosity, having three distinct legs, the third leg coming out in the middle of the body between the other two. In walking the hen uses the two outer legs, drawing up the other. But when she stops she stands on the centre leg, drawing the other two up close to her body. Hundreds of people have seen her, and none have ever seen her like before.

CHUCK'S BUCK'S HEAD.—*Greenbush, Ont., Dec. 14.*—I noticed in one of your papers some time ago a description of a buck's head that had over fifty points on the two horns. I have lately obtained the nearest to it that I have ever heard of. It is a buck's head with a palmed horn 4½ in. wide, having 25 points on the two horns. The head is no larger than a good-sized buck's head, but the deer, when alive, would weigh about 450 lbs. In appearance it is a counterpart of the cut I saw in your paper. I am satisfied that it is a different species from the common red deer, as I have a small head that I believe to belong to the same, but I am not certain. Perhaps you will know.

R. B. S.

We presume that the palmed horn is due to some injury received by the deer during the period of the antler's growth. There is no likelihood that it belongs to a new species.

CALIFORNIA QUAIL.—Will you or some of your correspondents who "have been there" tell us all about the California quail, both kinds—the so-called valley quail and the mountain bird? We would like to know of their habits and their qualities and value as game birds. Would they not be well worth bringing to the Eastern States to divide the burdens of "carrying off shot" with their cousin Bob White? If they are as desirable as their graceful carriage and beautiful plumage would indicate, and hardy enough to endure our winters, they should be as worthy of being introduced East as the migratory quail to be brought from his far-away home.

S. H. C.

We call our correspondent's attention to the article on the "Mountain Quail," by T. S. Van Dyke, to be published by us at once.

AN ALBINO QUAIL.—The *Petersburg Index* gives the following account of the killing of an albino quail in Prince George County:

Some days since, while a well-known gentleman of this city was hunting with his dogs in Prince George County, about four miles from the corporate limits, a covey of partridges was flushed, one of which was killed by the gentleman alluded to. The bird was killed about dark, and upon examination it was found to be a full-fledged white partridge.

Fish Culture.

THE CENTRAL FISHCULTURAL SOCIETY.

SECOND DAY.

THE meeting was called to order by the President promptly at 9:30 A. M.

MR. DORSEMAN offered the following: *Resolved*, That the Executive Committee be, and they hereby are, directed to lay out a programme for the next annual meeting of this society, choosing for discussion such topics as to them seem timely and important, assigning papers on the different subjects to the members most competent to treat upon them. *Resolved* further, That such programme be decided upon at least three months before the time fixed upon for the meeting, the members to whom papers are assigned to be at once notified by the secretary of what is expected from them, and requested to forward their papers to the secretary in case they are prevented from attending in person. Carried.

THE SECRETARY then, in the absence of the writer, read the following paper:

ON THE FOOD OF YOUNG FISHES.

BY S. A. FORRES.

I cannot learn that anything has been recorded respecting the food of young fishes in this country,* nor have I been able to find any evidence that this subject has been systematically studied in Europe, in such part of the ichthyological literature of Europe as is accessible to me. From the translations of papers published in the appendices to the report of the United States Fish Commissioner I learn that the artificial use of Entomostraca for the food of young trout has been successfully attempted in France. I also find in the bulletin of the "Société d'Acclimatation," of Paris, a statement (to the effect that, in the Russian governmental

*Perhaps exception should be made of a note relating to the occurrence of diatoms in the stomachs of two young whitefishes, published in the appendix to the Report of the U. S. Fish Commissioner for 1872-3, p. 57.

establishment for the cultivation of fishes, young trout and other valuable species are fed with beetles and insect larvæ obtained from stagnant water, by means of a small muslin net. Although the use of Entomostraca is not specially mentioned in this extract, yet they must, of course, be obtained in the search for insect larvæ.

That this subject should not have been long ago thoroughly investigated seems a surprising fact, when one considers the vast amount of labor which has been expended upon fishes as a class, and reflects for a moment upon the interest to science and to practical fish culture of a knowledge of the food resources of fishes and of the competitions of the various species in the search for subsistence.

Although I cannot yet treat this subject as fully as it deserves, the results of such study as I have been able to make, during the past season, of the contents of the stomachs and intestines of small specimens, seem to justify this preliminary notice.

It was early apparent, in the course of the investigation, that the food of many fishes differs according to age; and it was soon found that the life of most of our fishes divides into at least two periods, and of many into three, with respect to the kinds of food chiefly taken. Further, in the first of these periods, a remarkable similarity of food was noticed among species and families whose later food-habits are widely different.

The full-grown black bass, for example, feeds principally on fishes and craw-fishes, the sheepshead on mollusks, the gizzard shad on mud and Alge, while the catfishes are nearly omnivorous; yet these are all found to agree so closely in food when very small that one could not possibly tell from the contents of the stomachs which group he was dealing with.

It is my purpose in this paper to give what facts I have relating to the food of our fresh-water species during their first period of the fish's life, avoiding technical details, and mentioning only the general results of the investigation.

These facts were derived from the examination of one hundred and twenty-six specimens, ranging from three-eighths of an inch in length up to an inch and a half, and in a few cases to two and three inches. These specimens belong to twenty-four genera and represent eleven families. In two or three genera no specimens were obtained small enough to be regarded as belonging strictly to this first food-period, but the earliest food is nevertheless plainly inferable; and the general distribution and variety of the species studied is such that I think the main conclusions will be found to stand the test of full investigation.

PERCH FAMILY.

The food of a common perch, from an inch to an inch and a quarter long, consisted wholly of Entomostraca and the larvæ of Chironomus. The first of these infuses is applied to the minute crustaceans, which are found most abundant in lakes and other stagnant waters, but occur likewise, to some extent, in running streams. The name of water fleas is sometimes given to a large section of this group. Chironomus is a small gnath whose larva is familiar to all who have ever noticed the minute animals of stagnant water. It has the appearance to the naked eye of a minute red worm, which moves through the water with a violent wriggling motion.

BASS FAMILY.

No very small specimens of the bass proper (that is, of white bass and striped or brassy bass) were taken by us, the smallest being a brassy bass an inch and a quarter long. Half of the food of this consisted of Entomostraca, and the other half of minute gizzard shad.

SUN-FISH FAMILY.

A group of 43 specimens of the sun-fish family (which includes the two species of black bass) was made up as follows: Of five specimens of black bass under three-fourths of an inch long, two of rock bass of the same size, two of goggle-eye from seven-eighths of an inch to an inch in length, ten of common sun-fish from an inch to an inch and a fourth, nine of pumpkin seed from one and a half to two inches, five of crumple one inch and a half, and four of "three-fourths of an inch to an inch and a half, and six indeterminate specimens, probably common sun-fish, from seven sixteenths to five-eighths of an inch long. Ninety-six per cent. of the food of these forty-three specimens consisted of Entomostraca and larvæ of Chironomus—seventy of the first and twenty-six of the second. The trivial remainder, consisting of the larvæ of May-flies and other similar insects, a young amphipod, with traces of water-mites, water-bugs, and mollusks—the last taken by the "pumpkin seed," or bream.

SHEEPSHEAD FAMILY.

A single sheepshead (*Hoplosternus*), an inch and an eighth in length, had eaten Chironomus larvæ (seventy-five per cent.) and larvæ of May-fly.

PIKE FAMILY (*Esoxidae*).

I did not have the good fortune to obtain any young of the common pike, and can only report on the food of a single salmon-pickered (*Esox salmositæ*), an inch and a fourth in length. This specimen, taken at Pekin, Ill., on the 21 of June, had already begun its life labor of the elimination of remainder consisted of Crustacea composed about equally of young Amphipoda, Daphniidae and Cyclopidae. The presence of so large a quantity of these minute Entomostraca in the stomach of a pickered of this size is sufficient evidence that they form the principal part of its food at an earlier age.

HERING FAMILY.

We come next to twelve specimens of the gizzard shad, whose minute fry swam in countless numbers in the waters of our larger rivers in midsummer. These were taken in June and July, from the Illinois River, from Ottawa to Peoria. The smallest of the group were twenty mm. long by two mm. wide—as slender as cyprinoids and nearly cylindrical, although the adult is a high, thin fish. I was greatly interested by the discovery that the maxillaries of these minute specimens are provided with teeth—a single row of nine or ten on the lower edge—although the mouth of the adult is entirely toothless and smooth. The internal structure also differs remarkably from that of the adult, especially in the much greater simplicity of the digestive apparatus.

In a young gizzard shad, seven-tenths of an inch long by one-tenth of an inch high, the intestine was found to pass almost directly from the anterior end of the stomach to the vent; and at this time pyloric caeca were entirely wanting. The intestine of this specimen was filled with various species of Entomostraca.

On the other hand, in a fish three and three-fourths inches long, showing the general characters of the adult, the intestine passed upward and backward from its origin, running without flexure the whole length of the body cavity (this part being covered with an immense number of pyloric caeca), then turned forward to the stomach, and made a large number of intricate turns and doublings from side to side and end to end of the abdomen, extending, in all, about eight times the length of the perivisceral cavity. This intestine was well filled with mud with only a slight sprinkling of unicellular Alge.

These twelve fishes, all under two inches, had eaten about ninety per cent. of Entomostraca, two per cent. of Chironomus larvæ, and for the remainder, Alge.

MINNOW FAMILY.

A single minute minnow, three-eighths of an inch long, which I could not determine specifically, had eaten Entomostraca (twenty-five per cent.) and Chironomus larvæ.

Three specimens of the common club minnow (*Stemotilus corporalis*), ranging from five eighths inch to one inch, indicate somewhat doubtfully an exception to the general rule, respecting the early food of fishes. Only seven per cent. of their food was Entomostraca, and the whole remainder consisted of filamentous Alge. It should be noted, however, that twenty per cent. of the food of the smallest specimen, which was five eighths of an inch long, was Cyclops, and it may be that the club minnow lives wholly on Entomostraca at first, merely changing its habit earlier than most of its allies.

SUCKER FAMILY.

Thirty specimens, representing five genera of this peculiar family, were studied. A very curious feature of the food of the young is the frequent dependence of suckers of all sizes, six inches long or more, upon food still more trivial than Entomostraca, viz.: upon wheel-animalcules, Protozoa, and minute one-celled plants (Alge). While only such Protozoa were found as are furnished with firm shells, yet the abundance of these in the intestines of these fishes leaves little doubt that the more perishable Protozoa must also be taken in considerable quantity. It is an interesting fact that even here the smallest specimens were found feeding on Entomostraca only, and it is therefore possible that these form the first principal food of the family.

Ten specimens of the stone-sucker, ranging from one and three-eighths to three inches, represent two dates and localities. The four smallest, none longer than an inch and three-fourths, were taken from the Lower Fox, July 9, 1879. The others were from Mackinaw Creek, in Woodford County, Ill., in the latter part of August. The situations were similar, both streams being swift and rocky where these fishes were caught.

Their food was chiefly the larvæ of Chironomus (90 per cent.), the remaining ten per cent. being made up of various species of Entomostraca and Alge.

We trace in this a remarkable resemblance to the food of the darters, which frequent similar situations. Lacking the sucking mouth of Hypentelium, they do not take Protozoa or unicellular Alge, but in other particulars agree closely with this species. This curious fish is peculiar among the suckers in the unusual development of the pectoral fins—a distinguishing feature of the darters likewise—doubtless related in both cases to the constant struggle with a swift current. We may also remark the darterlike glow of color in the young of this species—a very peculiar distinction among the Catostomidae. This is one among many facts which indicate that exposure to light has great primary effect on the color of fishes—an effect often suppressed, through natural selection, by secondary influences, but manifesting itself where these are not brought into play.

This species is in marked contrast with the darters, not only in the rapidity of its growth and the slimy, size attained, but, in the form and size of the head, which in the darters is small and pointed, but in these fishes is unusually large, square and strong.

The principle of adaptation has here resulted in a different line of development. While the little darters have become fitted to fit and pry about beneath the stones for their food, the stone-sucker has acquired the power of rolling the stones before it. As it grows larger, it resorts of course to deeper water, but always prefers the rocky reaches of the stream. The molding power of natural selection could scarcely have a better illustration than that afforded by the adaptive characters, both similar and dissimilar, of these two widely separate groups of fishes.

A single small specimen of black sucker was too large properly to come within this group, but although six inches long, most of its food was Cyclops (eighty per cent.). Other items were Entomostraca, various species of Alge and very young individuals of the river mussel.

Four club-suckers, two of which were three-fourths of an inch and no more in length, differed greatly in food from the foregoing. The two smaller specimens, from Peoria, near Pekin, taken June 2, 1880, had eaten only Entomostraca, with a trace of water mites. In the two larger specimens, locality and date unknown, a surprising number and variety of the minutest animal and vegetable forms were found. A small larvæ of a dragon-fly and a very young amphipod were also recognized.

A specimen three inches long, from Peoria Lake, in October, had eaten only Entomos, with a trace of Chironomus larvæ.

Two specimens of red horse, varying in length from an inch to two and three-fourths, taken in July and August from the Fox and Illinois rivers and from Mackinaw Creek, show no important differences of food.

In the smaller specimens taken from the Fox and Illinois, Entomostraca were relatively more important, sometimes constituting nearly the whole food; but no attempt was made to fix precise ratios.

In the four larger specimens from woodford County, shells of protozoa were estimated to form 85 per cent. of the contents of the intestine, the remainder consisting of alge, wheel animalcules, Entomostraca, water-mites and the larvæ of Chironomus and other Diptera.

The small percentage of Chironomus larvæ shows that this species has not the habit of the stone-roller.

Two specimens of the common rock sucker, six inches and six and three-fourths in length, taken from Mackinaw Creek in August and June, had eaten food so similar to that of the preceding genus that detailed description is unnecessary.

Two specimens of our commonest buffalo fish, called the "red mouth" in central Illinois, seven-eighths of an inch long, had eaten most fully of unicellular plants (92 per cent.).

*A related fact is the bleached appearance of fishes taken from the almost stagnant water of mud-ponds in the Mississippi bottoms.

vicissitudes, I started on a journey to the republic of Mexico on the memorable first of April, 1857, which proved by no means a lucky one. Arriving in Cincinnati by rail, I went down to the Ohio to ascertain if any steamer was likely to start soon for New Orleans. Among an immense number advertised to sail to that port as soon as their cargoes were on board, I observed a small, unpretentious one named the Anglo-Saxon, placarded "Positively to sail in the morning." That was just what I wanted. Going on board, I was informed by the purser that there were only two berths vacant, and told that if I wished to secure one I could only do so by paying my passage money down. Here the simplicity ended upon me at birth served the rascal's purpose. I believed him, paid the \$25 and walked the streets of that pig-sticking city for more than two weeks before the Anglo-Saxon positively sailed in the morning. Two weeks more were spent in "sparring" over the shoals of the Ohio and two more intervened between Cairo and the Crescent City. On the night, as we were steaming down the Mississippi, the vessel was on fire, the flames being subdued by the passengers, evidently to the chagrin of the captain and purser, who, it was said, owned her. An officious and silly steerage passenger, who had noticed some strange conduct on the part of those officers on the night of the last fire, foolishly gave expression to his suspicions. That very night, shortly after the fire was extinguished, a splash in the water was heard, and nothing was to be seen of the talkative passenger. In the morning, doubtless he had been thrown overboard. On the 10th of April, 1857, I was again waiting for a pilot. We steamed over the bar into the harbor, the passengers were landed by boats from the shore and the fire was subdued by the aid of a number of low Mexicans, who were sent on board. A stage ride of twenty-five miles and we were landed at Miller's Hotel, Brownsville. This was an unlucky first of April on which I left the Crescent City.

A few days after I crossed the Rio Grande on a scow, pulled over by a rope, into Mexico, and bent my way to Matamoros. On the night, as we were steaming down the river, my usual starting day in the succeeding year, and started for Durango. A few months sojourn here and I was off to Zacatecas. In '62 the French invaders, disregarding the celebrated treaty of London, forced their way into the interior, and in the beginning of '63 were on their way toward the city of Montezuma. The troops from the States of Durango and Zacatecas were off to defend the ancient capital; and I got a quiet hint that I would have to accompany them *notas* *volens*, as chaplain, I suppose, or in some other capacity. I was not a little frightened, and feeling that I was "wanted" at home, I hurried off to the coast and took passage on the Olivia at Bagdad for New York, on the memorable 1st of April, 1863. That was very near proving the last anniversary of my birthday. As the boat conveying us to the vessel was passing over the bar at the mouth of the river the swell was so heavy that we were all drenched and the boat nearly swamped. A couple of the sailors seized my trunk to throw it overboard, so as to lighten it. That trunk contained all my worldly goods (riches), even to my passage money. Scotchman-like, I clung to my sifter, and pulling a revolver from my belt, told them they might throw themselves over if they liked, but that that trunk should remain on board as long as I was alive to protect it. Some of us set to bailing the boat with our hats, and a few powerful strokes from four long-sweeping oars in the hands of braveny tars carried her safely over the bar into the gulf, and soon we were walking the deck of the brig, I taking care that my trunk was not again thrown overboard, that was a second lucky 1st of April when I left the shores of the native soil of pronouncements.

We lay off the land for a few days, while the patriotic merchants the Olivia had brought from the north were disposing of the arms and ammunition with which the vessel had been partly freighted to the Confederates for the slaughter of the Northern troops, taking cotton in exchange. Already we had on board two or three captains, whose vessels were now before us, and a few sailors, but who had nothing to return with save their policies. In the meantime I amused myself fishing for mullet and small blue catfish over the side of the vessel, and watching a Mexican fishing in a novel way inside the bar, where the water was comparatively still. He would wade out till the water reached his hips, then whirling over his head an instrument made of stout twine, with numerous arms (of twine) radiating from a common centre, each being some five or six feet long and having a coarse hook and ring, a couple of cunecs at the end, till the extended arms gave the appearance of an immense wheel. He would throw it from him, and it rapidly sank. As soon as it reached the bottom he would haul it ashore by means of a rope tied to the ring in the centre, and extricate the fish that had become entangled in the net, the iron hooks embracing each other, as it were, as it was being drawn in, and so preventing their escape.

At length the signal for sailing was hoisted, and the patriots were rowed on board. They consisted of two or three veritable Yankee merchants, who, "before the war," had probably kept oyster or lager beer saloons, but who then sported massive gold finger rings, mounted with diamonds, heavy gold watches richly jeweled, fine clothes and linen, and carried an immense quantity of *spurge*; two Jews, who had doubtless dealt in "ole cio" just previous to the breaking out of the rebellion, but who had suddenly become frugal, and were before me, who could talk of fishing for less than cotton by the hundred bales, flour by the thousand barrels, and everything else in a similar Christian-like strain; and a low, common looking Irishman, whose mercantile ambition but a few short months before could not have ascended higher than peddling potatoes and fish in the back slums of New York, but who then could talk as big American as his brother patriots, albeit it was somewhat broguey, and, like them, could, while at the North, denounce the Southerners harshly, and now, at the South, could furnish them with arms and ammunition for a North American expedition. I formed a high estimate of the patriotism of a certain class of Northern merchants, by the weapons and missiles they were shipping, sustaining the war their fellow citizens were losing their lives in their efforts to bring to a close.

Well, our anchor is weighed, the sails are unfurled and the Union Jack, that emblem of power and security in those

days, waved at the stern of that American built and owned vessel, to protect it from the Alabamians and Shenandoahs that at that time were sweeping American commerce from the sea. Notwithstanding we were a peculiar people on that ship, we got along pretty comfortably. The Jews could take a rasber of bacon for breakfast as readily as any of us, the law of Moses to the contrary, governed probably by the fact that they were not at that time in a Christian land; but the Irishman declined meat on Fridays, and, there being no fish on board, he had to put up with potatoes and biscuits. Always on either side of the vessel could be seen the white stars of sharks be seen. They did not appear to move a hair, while we were sailing at a good pace, and yet were never felt in the rear, but constantly slyly peered along our deck with those cold, cruel, murderous-looking eyes of theirs. Hour by hour the porpoises showed in an undulating manner their hog-like forms, and swept under our very bows, as if braving our anger and mocking our slowness. The flying fish, to avoid their enemies, darted in myriads from the sea, passed over the crested waves but a few feet above them, and then helplessly fell into the water again. The pretty little striped rudder fish hugged our rudder as closely as a well taught and obedient retriever does the leg of his master when with an inward move of the hand or a gentle "close" it is intimated that he is to take that position. And the pretty dolphins played around as lambs who had never heard of wolves or coyotes in a pasture field. I learned to catch some fish and the Irishman learned to eat some, so I rigged up a stout line with a good-sized hook, baited with the memorable slice of fat pork, and was about to cast it over the stern, when the Captain yelled out from the centre of the deck, "Stop that! No one ever caught a fish by trolling in the Gulf Stream yet, and nobody ever will. Nobody but a blamed fool of a Britisher would ever think of trying it."

"Softly, Captain. There's no knowing what a Britisher might accomplish which a Yankee would never think of trying. Just look at that noble flag, freedom's emblem on the seas. It affords your vessel more protection—in the Gulf Stream—than the entire navy of the United States would ever dream of attempting."

"Just shut up there, or, by Old Abe, I'll jerk you overboard, as a present to that twelve-footer that's running along to leeward. That rag—"

"Is feared and respected where no Yankee flag dare float. Without it at her stern the Olivia could not show her bow-sprit south of Staten Island."

"You darned scoundrel—drawing out the last word as contentiously as one would draw a patent or speaking license his nostrils can draw—'of a dilapidated monarchy, I'll show you how to insult a citizen of the glorious, free and independent United States of America on board his own vessel,' and he rushed toward me."

Fortunately that vessel had a kind of rope ladders leading from the sides up aloft, up one of which I flew and was soon beyond his reach, for he had a very sore leg and could not follow. Seated among the rigging I gave him several stanzas of "The Fish and the Fisherman," and even the Irishman, the breeze," which didn't appear to either edify or mollify him. He paced the deck in a kind of sullen, angry mood, till the other watch was called, when he went below and I came down. Whenever he turned his back for a few minutes that look and fat pork went overboard and trailed in the Gulf Stream behind our vessel. As soon as he came on deck he'd glance toward the man at the wheel to see if I was near him with the inevitable line in my hand. On spying me in my usual position at the stern, he'd make a lout for me with a "Didn't I tell you that nobody but a damned Englishman would ever think of trolling in the Gulf Stream?" I always managed to escape him, though on several occasions I felt the tip of his shoe lightly touch a spot that a saint to be more honored in the breach than out of it. In a minute he'd jerk the line on board and throw it, hook, bait and all, contemptuously aside. Hour after hour and day after day I pilet the forbidden avocation of trolling in the Gulf Stream, whenever opportunity served. In vain. Hopeless despair seized me, and even the Irishman, who had lost hope, and averred that he was no great lover of fish. The captain swore and railed at me, laughed and ridiculed me. Nay, he even went so far as to awake me at midnight by yelling, "Hudn't you better throw out your hook, Englisher? There're no good fish in the sea as ever were caught!"

With a warm blessing on his Yankee entenses I'd turn me over, and while making every effort to go to sleep would be torturing myself with vengeance. The best revenge I could have would be to catch a fish, and then to tell the Captain just to show him what a Britisher could do. But that gratification seemed for ever to be denied me. Dolphins in plenty followed our wake. Now and then one of them would approach the pork as if to smell and interview it, and, although I would draw it forward slowly at times, and hurriedly at others, being it first to one side and then the other to tempt them, they proved uncharitable and far less accommodating than the few passengers, who could take a little piece of pork. I changed the bait frequently and employed various devices to allure one of those sly ones of the deep "to try his luck." One day at the suggestion of one of the sailors I soaked the pork in tobacco juice, but instead of the weed enticing them it repelled them. I tied a piece of red flannel with the pork next day, but this they must have taken for the bloody standard of some of the finny Alabamians of the ocean, for not a single one was visible during the half day that was trailing. Then I dipped the bait in scented hair-oil, and the way they scooted about it did not seem to be so good as the last, but I was certain of a bite. But, alas! "they had no hair on the top of their heads" nor anywhere else, and therefore did not require the perfumery. Having a Mexican dollar with a hole in it I polished it up and tied it at the tip of the bait thinking that its brightness might probably attract them, and would have baited the hook with my trunk, passage money and all, to have had satisfaction of that Yankee skipper if I felt certain of catching a fish. But the fish either knew not the value of money, or were not to be so seduced cheaply. Finally "fond recollection" came to my aid. Ingenuity had been taxed to the utmost without success. All the "manly arts" I could think of had been brought into requisition, but to no purpose. Dreams of my boyhood, when I used to catch Miller's thumbs and club with a white-brown thread for a line, a bent pin for a hook and a magnet for bait, returned to me and I spat upon the bait for luck. Three or four dolphins were sporting around our stern when gently I dropped the bait into the Gulf Stream. The fisherman was for a moment talking to the other passengers, and I crunched by the wheel to escape his glance should he look that way. The honored Union Jack waived defiantly from the gaff. Then, suddenly and energetically, the line was tugged almost out of my hand!

It was such a pull I thought that a twelve-foot shark had taken the bait, and would soon take me, too, if I didn't let

go. Quietly raising myself I peered over the stern, when to my great joy I beheld a noble dolphin fast on the hook! With a yell of delight I shouted, "I've got one! I've got one! Britannia rules the waves!" and began hauling in. The captain barely turned toward the stern, and drew out through his nose, which seemed to be his principal organ of speech, "You've got one! You damned English fool, you! If you don't quit that stupid trick of trolling in the Gulf Stream I'll mill you with a handspike over your thick skull!" I hauled away, till "the man at the wheel" cried, "He's lost one, and a shopper, too," when he ran aft as quickly as his sore legs would let him. "Haul him in quickly, or you'll lose him. Give me that line." And, seizing it, out of my hand, he hauled away as if his life and not the dolphin's depended upon the latter's being landed upon the deck. In a second he was over the taffrail and at our feet. What a beauty! Rainbows I've seen in many climes, sunsets I've beheld on the prairies, mountains and the seas, but my first, my only dolphin, surpassed them all in the rich blendings of its variegated colors! Would that I could have preserved it as it came from the sea; it would have been a treasure, a wonder, a thing of joy for evermore. The captain called all hands to come and see the pretty creature ere its eye became dim, and its pristine splendors had faded away. Quickly the brilliant hues were dissipated, and ere the fish had ceased to live the entire surface became a dirty, leaden hue. I had had my revenge of that Yankee skipper, and glanced about the deck singing, "Rule Britannia! Britannia rules the Gulf Stream." Till the whiz of a marline-spoke as it flew by my lug (or) I could not matter how completely the Union Jack protected the Olivia it was in vain to protest to me personally. Next day was Friday, how I regretted that it was not the anniversary of my birth also, and we had the fish for dinner. The Irishman was delighted. He liked fish once in a while, though how he or any one else could discover any pleasant flavor in the flesh of a dolphin I can't surmise.

I was not done with the captain yet. Arrived at Sandy or some other Hook everything about the vessel was in apple-pie order: both passengers and crew were full-rigged; the Union Jack was lowered, and the storm and stripes came on board. There wasn't much danger then. The health officer came on board, and while he was inspecting things above deck I skipped into the cabin, unfolded the beloved old rag, and fastening it with a couple of forks in front of the captain's berth hastened up to pass muster. Soon the skipper led the way to the cabin, where I suspect he had a bottle of something palatable for the doctor to put him in a good humor and thus secure a clean bill of health. That doctor was a citizen of the great United States, and had been possessed of more warm (hot if you will) patriotism than the captain, the merchants, the Jews and the Irishman altogether, while they were in the Gulf Stream. "What's this! What does this mean?" he exclaimed on beholding the emblem of freedom serving as a curtain for the skipper's cot. "Dash that dashed Britisher," the captain screamed. "He fixed that filthy rag there, and he tore it down. I was peeping down the stairway." "Shame, captain," I cried: "that sacred banner of our safeguard, your protection, since you left down to him he made up the stairs for me, and I made for my usual place of safety up the rope ladder, whither his dog wouldn't permit his following. While he was looking about for something to hurl at me I moved a few steps further up aloft so as to be out of harm's way, and whined out in the purest nasal sounds I could command, 'No American citizen ever caught a fish by trolling in the Gulf Stream, but a dashed fool of a British subject did.' With a shake of his fist, a grinding of his teeth, and a 'Dash you!' he disappeared down the cabin stairs. In the course of time he and the doctor returned to the deck. His figure-head was red all over, but the doctor had pointed only the point of his bow-sprit."

Next day I parted from Captain Townley. He was an excellent fellow; a sober, careful commander, a really good-natured fellow, notwithstanding his little eccentricities, and possessed of nobleness of heart that distinguishes the genuine American, both North and South of the imaginary division line. A week or so after my return to this city I received a letter from him containing a complimentary address the subjects—Jew and Gentile, American citizen and British subject—had presented him with, and that was the last I heard of him. Should it ever be my lot to go to sea again I hope I may not be on the first of April, and trust that I may find a worthy, generous soul like him skipper of the vessel.

Toronto Gun Club, 1880.

THE PARR OR SALMOT.—English anglers are discussing the old question whether the parr is a distinct species or a young salmon in the columns of the *Fishing Gazette*. The question was settled so long ago that we are surprised to see the answers called forth by some writer who displays his ignorance of natural history by declaring them a distinct fish. There are just such men in America but no one heeds them.

WOODMONT ROD AND GUN CLUB.—Washington, Dec. 29.—*Editor Forest and Stream:* I promised you that when our fishing season closed I would furnish you with our score. Our season commenced May 16 and closed October 20. It being our first season since the organization of the club, there were only occasional small parties fishing during the entire season. Yet we have scored as follows: Caught 41 black bass, weighing 286½ lbs.

A. H. EVANS.

FISHING IN ONTARIO LAKE.—A correspondent says that notwithstanding the poaching with nets there are still fish in this lake of Central New York and that seven barrels of "pike" (wall-eyed pike or pike-perch) were sent to New York in the middle of last month. The fish weighed from one to six pounds, and they are still catching them. The trout put in the lake by the State some years ago have not been heard from.

LARGE BLACK BASS.—Galesburg, Illinois.—A few days since I was in Batavia, of this State, and had the pleasure of meeting your correspondent "Hix." Of course I need not weary for his eminent trustworthiness. In the office of P. Kindblade I saw an outline of a large black bass (small

mouth) caught at North Aurora by Wm. Messenger. Its length was 23 inches, and it weighed 7 lbs. 11 oz. The outline was drawn and the size and weight taken at the Internal Revenue office, Aurora. This is the statement recorded upon the paper upon which the outline was drawn. My only observation is that the fish must have been in excellent condition or else treated with a diet of pebbles. T. R. W.

Game Bag and Gun.

GAME IN SEASON IN DECEMBER.

Robin, Alca americana. Red or rice bird, *Dolichonyx oryzivorus.*
Carolina Parula carolina. Wild Turkey, *Meleagris gallopavo.*
Elk or wapiti, Cervus canadensis. Mottled grouse or prairie chicken, *Tetrao canadensis.*
Red or Virginia Duck, C. virginiana. Inland grouse or pheasant, *Bonaparte's quail.*
Squirrels—red, black and gray. *Red-bellied, Sciurus rubicundulus.*

"Ray birds" generally, including various species of plover, sandpiper, snipe, curlew, oyster-catcher, semi-palm, phalaropes, avocets, etc., coming under the group *Limicola*, or shore birds. Many States permit prairie fowl (quaint *grouse*) shooting after Aug. 15.

MR. SCOVEL TAKES A SHOT AT THE GRAY SQUIRREL.

"SANCHEO PANZA" and "BORDEN RUFFIAN," have, through the brilliant and healthful pages of the FOREST AND STREAM, kindled anew in my pulses all the old love and the conciliatory ardor with which I hunted the gray squirrel along the Ohio River and the Kentucky hills, and around the hill sides and through the back woods of old Hanover twenty-five years ago.

My youthful Sydney, who never knew the wild sports of the West, may have shot his maiden title at a turtle dove or a chickadee in Jersey, but is profoundly unskilled in the keener pleasures of the Indiana forests, where twenty-five gray squirrels frequently rewarded the Reverend Doctor—and myself for an afternoon's sport, when we "skipped" the venerable but sweet tempered Sturgeon, professor of Greek, and if we were not "up" the next morning in accurate translation of how Xenophon's soldiers when they saw the ocean exclaimed:

"Hailatis! Hailatis!"

"Do these creatures then inhale sea,"

we were smart enough, to placate that most amiable and accomplished Greek scholar by sending him one of our squirrels. He was a quasi Ralpheus, with all the ancient gourmet's love for the *edible et blendi*, but without considerable moral force, and that Professor Sturgeon could handle a birch rod *a priori* and otherwise, the Reverend Doctor—can tell with perfect truthfulness, if he will recall the days "when we went pyrepying" at fifteen. But the most pleasing recollection I have of the Professor is as he snatched his lip at the story of the "Pious Eves" as he cooked his fish venison by the easy spitting cedar, and drank the wine divine of those festive if ancient days. Alas! how changed. The Reverend Doctor in those days got his share of the lickings, but had the most of the fun. Now he preaches and I practice. He

"Allures to brighter worlds
And leads the way,"

while I have followed the quiddits and quillots of the law, taking an occasional sly at politics, which have been called the sum of all the sciences by Madame de Staël, while some of the "latter day quillots" of politics have made it look more marvellously like the "sum of all the villainies." After listening to my friend, the worthy Doctor, for an hour, discarding the "exceeding sinfulness of sin," I could hardly believe he was the same boy whose hide (like my own) was so industriously tanned by the venerable but somewhat irascible Sturgeon.

"Sancho" tells with great *esprit* how he tied his hat to a bush, and, with a very few squirrels, left himself to the other side of the tree and tweaked the bush with a string till the animated rodent would rush into the very jaws of his trusty Westly Richards. This is nearer than any trick I ever played on the mischievous but gany squirrel. And I dislike to tell it, but if the truth of squirrel hunting must be given I will admit in a kind of a pious confession and avoidance, that the Reverend Doctor has of late called me into his study, and after we had spent an hour in reading Rev. Dr. Cox's admirable work on "Interviews, Historical, Memorable and Useful, from Diary and Memory Reproduced," or after discussing some pages of "Butler's Analogy of Revealed Religion," my friend would gently intimate that he had never dined on him till recently were it that I was always so kind as to lust on his going around on the other side of the tree to get the first shot at the squirrel. And with charming naïveté he would always say,

"My dear Brother J., was it not a little singular that when I went around to get the first shot at the squirrel he used to leant around to your side of the beech tree, and you killed two to my one?" "Such" he would remark "is the perfidy of man, that till recently I labored under the impression that you were benevolently giving me the first shot at the gray squirrel, not that I was scaring him around so you could kill him first." Now, the moral of all this is, that a better way than Sancho's idea of a bush and a string is it to leave a yellow hunter cease the squirrel over to your side of the tree.

All lovers of the woods and streams will admit that the squirrel has as much curiosity as a voozan. Many of the beauties of Tennessee are fresh in my mind, because I first saw the well remembered lines in my pocket Tennessee as I sat beneath the leafy shade of the beech woods, near old Hancock at Butler's Falls, waiting for the game to come out of its leafy retreat. Not as lucky as the "Borden Ruffian," I have never had three squirrels to fall at the same time, but I have killed half a dozen squirrels in one morning from the same mulberry tree, and have in the fall of the year killed three from the same beech tree, by sitting down quietly and waiting to accurately distinguish the *locus in quo* by the peculiar and familiar "bark" of the squirrel, or catching the sound of the nimble rodents as they leaped from tree to tree. It was with a double barrel I saw a very shrewd and a clutch of books at my side that I learned my "pleasure in the money words to take," and read of the days of William the Silent, how the bitter Badelaar says of the Dutchmen of that day (and jolly drinker they were) that if one of them "woke up sober he felt sure he was sick." And among the most fresh joys, honest and innocent pleasures of my life I count those sweet, bright days when the May sun shone and amber light, the early dawn would be fairly between "and not Borden, nor Shelley, nor Wordsworth, ever reveled in diviner joy or more solid comfort and communion with

nature than did I, alone with my gun and my books, no companion save the frisking squirrel or the occasional wild pigeon.

Now and then a companion student would share my joys on some fortunate Saturday, and one of these old friends has just written from far off Missouri in these words:

"DEAR S.: If you were only seated at my side I would pour into your ears much of the poetry of my life since we drank in the pure air of the Hanover Hills, richer and better than the wine divine of Zamorine."

"I have tasted something of fame since last we met; known something of what the world calls love; but now, when I have seen twenty-five summers 'since we went Gypsying,' I often wish at nightfall that you were coming home to me, and if my arms are not literally stretched, every fibre of my frame, every emotion of my heart quivers with yearning to see that well remembered form and hear again that stately tread of thine. And yet how few, the nearest and dearest constantly, ever suspect that the calmly practical business man is often and perfectly satisfied with his daily surroundings. But ah! we must not forget that the affections only are immortal. And the heart needs daily nourishment as well as our bodies. But alas! how our days are shrouded into fragments and our nights into futilities, and there is little left to us but the fragrance of the broken vase, so sweet, it is true, if only with the perfume of a passing memory."

But I will quote no more. Ah! dear friend of my youth, I say let us hope that we may meet again and renew our youth like the eagles, and it may be in the forests and streams of far off Missouri we may revive and kindle over again the memories of other scenes of my life! But I have said farewell, and I will at least every day breathe an aspiration that I may, ere the day when the grasshopper becomes a burden, be locked in thy embrace, for it is Emerson who saith that such an hour as that come even to this world to every one of us. But why do I wander from the gray squirrel? And it is the fault of "Sancho" and the "Ruffian" if I have grown more didactic than the Reverend Doctor, my well beloved brother.

The young squirrel, as I remember, came in (at for the table) in early summer. And a more childish animal does not live. If you would only wait the young thing would skip through high grass within ten feet of you—falling an easy prey at every shot. Twenty-five squirrels of an afternoon was a "dog" that you could gather any good day. Hunting with a squirrel was my alibi; two men make a complement, and the fall is the better season of the year. Instead of being hesitant about it fathers had better teach their children the use of the rod and gun.

Walter Scott says he who loves field sports hates to do a mean thing.

And Gov. Hawley says you need not be "afraid to drink to the dark" with the man who insists on putting a covey of quail on the wing rather than kill them on the ground.

I would like to see you and your BORDEN RUFFIAN more frequently read in our school-rooms and colleges.

But, Mr. Editor, my Christmas dinner is over, though our turkey was not as wild as Maj. Merrill's, and my essay is certainly like Montaigne's in one thing, it is discreet. My household gods are basking before the wood fire in a low-down grate in the parlor. Kris Kingle has been more than kind to the boys and girls and I must romp with the children the rest of the evening; squirrel hunting makes me a boy again.

J. W. S.

COWEEN SHOOTING.

ST. DAVIDS, December 2.

I PROMISED that I would send you some account of our shooting in this locality. Below I have endeavored (very feebly it is true) to present a description of our furred and feathered friends of the past and to-day, which may perhaps prove of some little interest to those of your readers who have visited this, "the old Niagara district," rendered somewhat famous, historically, as a frequent battle ground in the early history of Canada. One year ago the village situated at a short distance from Queenston Heights, the scene of the memorable battle of that name which was fought between the Americans and British in 1812, during the "little unpleasantness" which existed at that period.

Through the village runs what, years ago, was a romantic trout stream of clear spring water, but long since converted into a mill race. At its source, about a mile above the village, are numerous little woody dells and black boggy swales, the favorite haunts of the woodcock and herc. Every year, some eight or ten couples repair to rear their broods and live in luxury and security until glorious October. Forty years ago this little stream, bordered on either side with plentiful cover, literally teemed with cock for three miles from its rise, while the (at that time) but imperfectly drained meadows below afforded grateful resting and feeding grounds for innumerable snipe in their spring and fall migrations. Amid the rocks and trees, the water and here, every year, made their homes; and here in the fall a covey or two of partridge can generally be found. In this connection let me just say that here, after October, we find partridge as often in the trees as on the ground; indeed this year the tree appears to have the preference, and it don't tend to lessen the vexation usually attendant on such uncertain shooting as partridge in even their happiest moods, to have several "whir" out of the trees some twenty yards away, of course taking the opportunity of the shot impossible.

Twenty years ago the wild rabbit was a total stranger in this vicinity, while the American hare was abundant; but the latter has rapidly receded before its smaller relative, until, with one or two exceptions, it is confined to the most northern and western counties; and even there is fast diminishing in numbers. In former years this district was remarkably rich in game, as it was densely wooded and a dog warden's presence was few, and save in rare instances, the old flintlock musket was about the only weapon, if we except stones, which the aboriginal had at his command. Black squirrels thronged in millions, and wild pigeons used to—but I hesitate here, for I see a wild glare light up the gentle reader's eye, anticipating the elderly story of the man who missed the flock and shot off the fifteen bushels of loss; however, as the reader never did me any harm, I will spare him.

The only spring shooting we have in the district, and frequent the Niagara River during the winter and spring in myriads; but as some of your readers have probably never heard of a covey, I may more particularly describe it as an aquatic bird, much resembling in size and general appearance the butterball duck, save that the drake is ornamented with two tapering tail-feathers of about a foot in length, which, when the bird is on the water, are carried at an angle of about forty-five degrees from his back, but on wing are drawn straight out, giving him the appearance of a duck. The appearance, barring the color, of the common English pheasant. Their flight is even, extremely swift, straight and duck-like, and let me hasten to add, astonishingly de-

ceptive. When wounded they dive like a flash, and swim long distances under water. Great numbers of them fly nightly over the village on their way down from the river above the Falls to Ontario Lake.

The most comfortable and favorable method of pursuing this sport is to procure a good sized, roomy fishing boat—for, unlike ordinary ducks, they do not seem to fear a boat, so long as the hunter uses ordinary caution in keeping himself out of sight—a pipe and tobacco and some decoys. Sit about 4 a. m., if the weather is favorable, from Niagara to the mouth of the river, and about the hour of "day low." Resting on the lake, a short distance out, thousands of birds will be seen, and their peculiar, musical call, "Huk! Huk! Coween!" clearly tells us why they are so named. Soon a flock, the advance guard, get under way, and head up the river for their "first course," which in this case will be fish, more or less, as they have luck; and passing near the head the ball opens. If my friend, the sportsman, is a novice it will surprise him how many fancy strokes will make without taking anything into camp. We will suppose a pair coming straight at him, low along the water. He knowingly fondles his Greener, and mindful of the boatman's caution to "put it ahead of them," lays her on, follows carefully, and pulls; after which he smilingly looks over the barrels to see if he hasn't killed the boat. "Two feet behind the last one," quietly remarks the pointer. The smile fades away, and the bird strikes the water, splashing. Although he doesn't say anything, a bloodthirsty grin comes into his eye, and he grins his teeth and makes up his mind that the next one won't have a chance to grin at him like the last couple. And now flock after flock, single pairs, over him, right, left and behind him, come thick and fast; and our bewildered sportsman, growing excited, makes the other end of the boat an uninviting spot, to say the least of it; for he keeps the boatman busy dodging the revolving gun muzzles, of which the air appears to be full, as he swings them from side to side.

He bangs away both barrels into a flock, and seeing one tumble out, thinks: "Well, there's one fellow won't fool me any more." But as the bird strikes the water the spray flies high and down he dives the instant he strikes; the ruffled surface smoothes over, but no dead covey decorates it. "Hell-o! well, now where the deuce did he go?" And our friend's mouth flies open so far that the pointer feels a trifle nervous.

"No use looking for him; he's only wounded, and I'll come up somewhere near Toronto Bay," says that worthy; for unless killed dead—and they are about as hard to kill as a bull—it is almost useless to follow them. Perhaps, after a couple of hours, the two may have killed twelve or fifteen birds, and first fired shot into the water. The sport is glorious, but none but the initiated can enjoy good counts.

"The only cure one has after a good morning among the coveens is, *cul bona*? It is simply 'love's labor lost,' as the game (?) he has secured is not at all a palatable dish, for it is neither fish, flesh nor good red herring, although partaking largely of the nature of all three, being exclusively a fish feeder; and while one might keep Lent on them, yet as an *entrée* I think I should prefer even the red herring. Still, they do find their way into the stomach, and their plumage, and transfigured into wild ducks by the fishermen, who catch them in their gill nets, set deep in the lake for whitefish, when, as the birds are in hot pursuit of some of the smaller fishes, they run their heads into the meshes, and being unable to extricate themselves, are drowned. They are generally purchased by cunning strangers and recently imported boarding-house keepers, who think to secure wild ducks for their guests. A few evenings ago, when, however, the aroma of the roasting fowl began to pervade the premises, the long suffering boarders, with one accord (*en. cem.*, as it were), move out into the woodshed, or camp in the back yard until such time as the coffee upon the hot shovel (ye old time deodorizer) has been so vigorously circulated as to purge away the "ancient and fishy smell."

A few ducks, principally blue-bills, are killed in the river between Queenston and Niagara, and numbers of ducks, and even geese, are carried over on the wing against the catanael in the darkness, are next day picked up crippled or worse in the eddies below.

W. H. B.

THE OLD SQUAW OR FRESH WATER—Niagara, Dec. 27.—Your issue of the 23d says, in speaking of the "old squaw," that they are seldom seen on inland waters. The old squaw, or as we call them here, coxcoen, are common on the Niagara and on the Great Lakes. A few evenings ago a friend and I shot fifty-six in a day's shoot, over decoys, and in the afternoon we could kill from ten to twenty. We shot them from a boat in open water, with no kind of a blind—just threw out our decoys and waited for them to come within shot. They decoy best in the spring, after they have paired. We consider them the hardest duck to kill that flies. They not only fly swiftly, but are very tenacious of life. They have regular flights in the morning up the river and about 4 p. m. they commence to fly down and stay in the open lake all night. NIAGARA.

DUCK SHOOTING AND GAME LAWS IN CANADA.

I HAVE read with pleasure the many reports of your game laws that reach over States, and they are decidedly as near perfection as one could wish. The only trouble, or I might use stronger language and say curse, is the keeping of them, and to do this every nerve must be strained and proper penalties inflicted on the law breakers.

Alas! for the true sportsman in this part of the world; he is to be pelted. With game laws as prolific of penalties as a dog of fleas, yet he has no redress. I was unfortunate enough to fall into the net of the thoughts of duck-shooting at Grondines, about sixty miles west of this place, on the strength of an assertion made by two sportsmen (2) as they landed from the cars with two game bags full—"Any amount of duck"—and next evening saw me on my way to the fruitful shooting grounds. I landed from the cars at a station about twelve miles east of Grondines, intending to try to snipe on my way up, and as I had a good dog anticipated at least half a dog's trace. "Blessed is he who expects nothing," I tramped my twelve miles, not seeing the feather of a snipe and reached my destination perfectly "down in the mouth." About an hour before daybreak, with every gun prepared for a day on the beach, and a light drizzling rain with moderate easterly wind, my spirits were a little brighter than the previous evening. I started, walked two miles for the punt and paddled as many more till I reached the duck ponds, but my decoys in order, arranged my ambush, and the sun was in the north of the pond, and I was five paces about half a mile from the shore, and that was all the wild duck I saw that day. On my return to the house, raised a brace of snipe and brought them home with

me. That night at supper I asked the "matro de la maison" if any sportsmen had been up the way lately. He replied in the affirmative. "And did they get any game?" I asked. "No, but they brought a lot of ducks before leaving." So my two noted sportsmen had been shooting with the mighty dollar, and I did not miss telling them so.

Previous to retiring for the night I took a walk around the house, and in the direction of the beach I heard a continual barking for which I could not account, but was soon enlightened by the landlord. "They belong to hunters around here who shoot at night." This was at eleven o'clock and the moon was commencing to put in an appearance.

Next morning a trio of those midnight poachers inquired if I did not want to buy some ducks to take home. They were acquainted by the landlord of my luck. The had sold a lot to two guests that had been up there a few days previous. I did not buy.

I hired a team and drove about eighteen miles to an old woodcock shooting ground and left the boy with the horses, and with a cocker, that much-talked-of dog lately, bugged six and one partridge, after tramping about four hours. I afterward learned that two of those same poachers had killed twenty-three cocks on the same grounds about a week previous.

Now as I mentioned in the foregoing part of this letter, the protection our game gets is simply ridiculous. The two would-be sportsmen who bought the duck from those poachers knew perfectly well they were killed at night and that it was in contradiction of the laws, yet they countenanced the sale in contradiction of the laws, yet they countenanced the sale.

There is little or no use in lodging complaints with the authorities, as such would end where they were laid. The public market is stocked with partridges, some farmers bringing in as many as sixty brace for sale. Not one of those birds were ever touched with shot, every one of them were scared and then taken and pricked with a sharp fork to show where they were shot.

The only one of the game laws looked after here is that respecting the fish, and that is easily accounted for. Some gentlemen having an interest in a lake so worried the authorities that they at last named a fish inspector, and he does his work thoroughly, as we often notice in our papers the seizures he makes during the unlawful seasons.

On looking over some old files of our daily papers, dated May, I came across a copy of the game laws, on the one side, and among the daily items on the other, "First woodcock of the season killed by Mr. P.," and back for several years it has been a persistent course of rivalry between Mr. P. and Mr. J. who would kill the first woodcock of the season, and the law reeds, woodcock, etc., etc., not to be killed before August, yet they were always killed in May.

I am afraid there is no hope for us, unless some of the true blooded sportsmen club together and worry the life out of the authorities until they do some definite good. S. F.

FISH AND GAME IN TENNESSEE.

THE autumn of 1880 was not so good for anglers as was the autumn of 1879, for the reason that the warm weather and drought continued so late and the rains set in so heavy and the cold weather followed so quickly. Nevertheless, we had our usual fall trips of angling, commencing about the 10th of October and continuing until frozen out. Our first trip in October was an unusually pleasant one, and although our catch was not so large as we anticipated, it was well divided among our party of six. Nor were our fish as large as usual, running all the way up from one pound to four pounds.

After equipping ourselves with the best tackle, good teams, good wagons and tents and a good cook, we struck out for the Buffalo, a beautiful, clear stream in Perry County, distant seventy-five miles, over a very rough country road. We made the trip very pleasantly in one and a half day's travel, and located on the edge of the stream at noon of Thursday. The afternoon was spent in pitching our tents, resting, locating and providing for our stock. The forenoon of Wednesday, having on the way to the creek, five miles off, for minnows. Having procured a thousand minnows, and partaking of a good dinner prepared for the minnow catchers, we were ready to lash our reels and go at it all right. The clouds were threatening and a high wind blowing. We did not venture out far from camp that evening. The result was about fifteen black bass, two jacks and a fine blue forked tail cat. We continued fishing until the next Tuesday night, taking, all told, eighty-five fish, the largest black bass weighing four pounds, the largest jack eight and a half pounds, and the largest blue cat fourteen pounds—many more than our party could consume, and as many as we deemed sufficient to carry home. Much of our time was interrupted by storms and rain. We had our guns along, and from them the party feasted daily upon mallard and teal ducks and squirrels. We found the natives generous and as kind as could be, furnishing us with everything needed. A more hospitable people do not live than the people of Buffalo, nor does a finer stream run for fine fish.

Another party followed us a week later, and striking the stream eighteen or twenty miles lower down, had much better luck and weather than we had, one of the party alone taking twelve black bass, all averaging over four pounds each, and one jack weighing sixteen pounds, besides many other fish. He was on a deeper part of the river, and nearer its confluence with Duck River, a famous fishing stream.

Another party went out later to Reelfoot Lake, 140 miles distant, and reached it just as the snow and ice set in. They had a rough time, but captured in one-half day's time sixty black bass, running from three to six and a quarter pounds each. They killed ten geese and a large number of ducks.

Now that angling is cut off by the rough weather, hunting is the order of the day. Quail are numerous. A few pheasants and a few wild turkeys are the game sought with the gun. Squirrels, opossums and the red and gray fox are also abundant, with the gray hare, for the dogs. The summer was favorable for the quail and large numbers were seen. I suppose now it would be an easy day's work for a good shot, with his dog, to bag fifty per day. We have a colored boy, Charley, who is an inveterate hunter, has a first-rate pointer dog and a favorite gun, improvised by himself. He takes them on the wing in true sportsman style, and his gun is an old army musket, with rifle bore, about one-half of the barrel cut off, leaving him a very short gun. He took a little walk round this evening for a couple of hours and brought me in ten fine, fat birds as you have seen in the New York market. One evening last week he came in with forty quail, and it is common, every day's work to bring in two or three dozen birds. We find from one to a half-dozen coveys on every farm, and the farmers are very liberal, all allowing hunting

upon their farms without objection if the hunters will keep away from the stock yards and barns. From all I can see from the reports in your paper I am inclined to think we have as good country, and game and fish as fine and abundant as any country reported. We have good hunters, good guns and tackle as anybody, as hospitable people and as cheap living, and as good as can be found. The expenses total of our party, stove and cook, and for fourteen days, cost us, all told, \$5.15 each, and our country is as easy of access as any. We have splendid railroads leading to the hunting-grounds and the hunter can always find willing hunters to go with them, free of cost.

Franklin, Tenn., Nov.

REYNARD'S WILES.

"FOR ways that are dark and tricks that are vain" a red fox will compare favorably with any living creature, not excepting "Ah Sin" himself. Among the many resources at his command to outwit his natural enemy, the hound, Reynard prizes most dearly a rail fence, a road and the frozen surface of a river, and in these days of deep snows will rarely fail to avail himself of one of these means of safety. The rail raises the line of scent too high for the hound's nose, the frozen river and the well beaten road, besides the good footing they afford him, retain not a particle of the tell-tale scent so dear to the pursuer.

On two occasions F. and I, as well as my keen-eyed old hound Jeff, had found our fox vanish into thin air at one particular point, and though the snow lay deep on the ground, and by it we could see that the fox had come into the road, no amount of perseverance on our part revealed to us what had become of him after that. In vain we walked up and down the road in search of the tell-tale track; not a break in the even surface of the snow could be found, and we were obliged to return home and own ourselves outwitted, while Reynard, no doubt, sat watching us from some safe distance, and saying with *Puck*, "What fools these mortals be!"

But every fox, no doubt, as well as every dog, must have his day, and the mystery was solved on the next hunt. Enconced on a high piece of ground, and while the hills echoed with the mellow voice of the old dog, I saw the fox slip into the road, follow it for a hundred rods, then by one high leap land on top of a rail fence which ran at right angles with the highway, and, standing along the uppermost rail, he remained motionless, while the plowed ground with the wind had blown bare of snow, ran across the plowed field to within about ninety yards of me, when, jumping on a big rock, he curled himself up and deliberately lay down to watch the effect of his little game and enjoy the discomfiture of the hound. I dared not move, so opening my breech-loader I slipped in a long-range thread-wound cartridge, took careful aim, and sent a charge of double B shot through Reynard's handsome fur.

But foxes know more mischievous tricks than this, and dear to the heart of every old fox is a scamper down the smooth surface of a frozen river, which, besides offering an opportunity of escape, often permits him to take divergence on his troublesome enemy the hound. For Reynard is versed in physics and knows full well the difference of weight between himself and his pursuer: instinct teaches him to a nicety the exact thickness of ice required to bear his light fur-covered body, and that on such ice his more ponderous enemy may not venture safely. If you do not all this, as I often do, so as to lead down some swift stream along frozen over and covered with light snow, and note how the trail of the flying fox gracefully curves toward every hole and invariably skirts the very edge of every piece of swift open water. Many a good hound has ended his days by venturing to follow where his tricky enemy did lead, and I imagine if foxes ever laugh, and they certainly look as though they did, Reynard must laugh as he hears the echo of his hound's denials suddenly die away with the wailing gasp his game has been successful. If he did not laugh, F. and I, when all at once silence settled over the hills, but a minute before musical with the cheery notes of old Jeff's voice, for we knew the dog was on the treacherous river, and without losing a second F. hurried toward a piece of open water not far distant. On reaching it our fears were at once realized. Caught in the swift current, benumbed with the cold and exhausted by the attempts he had made to save himself, old Jeff lay with his head on the ice, his hind legs almost motionless, and whining piteously. There was no time to be lost, and unable to resist the dog's mute appeal for help, F. stretched himself on the treacherous ice, seized the animal by the neck, pulled him out, and in a minute the dog was rolling joyfully at our feet. Though benumbed with cold and covered with ice he at once took up the scent with an angry bark, and two hours after we had the satisfaction of killing the fox after one of the best runs I ever saw. Old Jeff.

OUR DETROIT LETTER.

THE next meeting of the Michigan State Medal Association will be held here on Tuesday, Jan. 4, when there will be an extremely lively contest, if one may judge from the present state of feeling of the prospective contestants. The medal is now held by Edward S. Barbour, an amateur, who does comparatively little trap-shooting, but who sometimes steps to the front with an astonished. He won the medal by killing eleven straight birds, and they were fast flyers too, wresting the honor of its possession from that splendid shot, Ed Gillman. This Association works under English rules, but has a sort of a man dog committee who insist on handicapping many of the recognized good shots, sending them back to thirty yards to pull against their less eminent opponents at twenty-one yards. This is not a matter in which I have any personal concern, but I cannot help hearing a good deal that is said about it. The fact is, there is considerable dissatisfaction with the action of the committee in this respect, many believing it to be unnecessarily arbitrary, and a hardship for those who chance to be skillful shots. The committee is composed of John E. Long, J. V. D. Eldredge and Wm. J. Mason, all irreproachable sportsmen and gentlemen, whose motives it would be presumption to impugn; and yet they are severely criticised for their official conduct. One prominent member of the Association, who lives in the interior of the State, has practically withdrawn on account of the handicapping regulation. He asserts that inasmuch as the Association's prime object is the promotion of field shooting, there is not only nothing to be gained by such a regulation, but it is a direct hindrance, and an injustice on the part of those at whom it is directed. I only echo sentiments which I have repeatedly heard expressed,

and I give them to the readers of FOREST AND STREAM as a wholly disinterested spectator of the doings of the association. I do not think there is much room to doubt that the management is a little primitive in its methods, and that a decided change is imminent. It may be of interest to those not acquainted with the fact to be told that the medal over which there have been so many spirited and splendid contests remains the property of the association until some member shall have won it three successive times.

This day ends the game season, and I assure you it has been a lively one in these parts. The hunters have had merry times and the dealers and commission men have had their hands full of business.

A small party of Detroiters went down to Maidstone Cross, in Canada, last Monday for a week's frolic among the game, but with the thermometer at twenty-two degrees below zero they found rather indifferent company. They ran upon plenty of quail, partridges and wild turkeys, but the twenty-two degrees chilled their ardor and drove them home with a bag composed of forty-three quail and fifteen partridges.

E. H. Gillman was presented yesterday by James Moore, of Toledo, with a Golden setter puppy, now five months old, named by Grange; I do not know the name. Fanatics hereabout affect to see some mighty promising points in the puppy.

The Point Moullie Shooting and Fishing Club will hold its annual meeting here next week, and on the 12th of January the State Sportsmen's Association will meet at Lansing, under the nose of the Legislature, which body will be asked to make some needed amendments to the game laws of this State. I shall keep the readers of FOREST AND STREAM informed of everything of interest or importance in that connection. G. P. G.

THE SILVER LAKE STAND.

Editor Forest and Stream:

In your issue of December 23 I see that a Mr. "X" has delivered an opinion on the wild geese shooting at Silver Lake, an account of which you published in the preceding number.

He is entirely welcome to his opinion. There are others whom I think might differ from him, and I should like to be allowed a chance to say a little in regard to this shooting, but not for "X," whose article is written in such a manner as to make it undesirable to state anything for his benefit.

The writer had been shooting all the early fall over dogs, and after woodcock, snipe and partridges for the benefit of health and for sport, and was very kindly invited to take up his quarters at the before mentioned stand at Silver Lake while hunting the vicinity for quail, and the interest and pleasure he took in seeing the manner in which the live decoys were handled was very great.

To be able to turn geese from their flight far overhead, and then light them—birds headed by a shy old gander that most likely has traveled the route back and forth from the far north for years—seems to me to require great skill, and I think that no man, sportsman or not (unless we except Mr. "X"), be present at such a time and not enjoy the excitement. The number of birds usually shot at, as near as I can learn, varies from five to eight, and the shooting is usually flying, as well as in the water, where they are often scattered; and several of the geese killed of the number mentioned in the last article were shot down at handsome distances.

The "butchery," so called by "X," as nearly as I can see, consists in now and then getting a chance to decoy, and shoot at a bunch of geese—a small part of the thousands upon thousands were shot by, far overhead. Why, the whole number killed last year's fall at this stand amounted to less than seventy each season an average of little more than one each day during the time the stand was occupied, and I believe this number may be killed in the West in three or four days, and no doubt, perhaps, by some of the readers of your paper.

I happen to know that the owners of this stand are men who go there for real enjoyment and for rest from hard work and worry.

I would also say that of the many with whom I have talked in regard to the shooting in question, perfect gentlemen and good sportsmen, not one has put forth an opinion like that from "X," and I believe there were none of them who would not have enjoyed being present. B. C. M.

I have long been a reader of your paper, and am pleased to say I like it better and better. Its typographical appearance is very much improved, and the tone of its editorial and correspondence is more in keeping with the devotion of a sound moral standard among its readers. The term "Gentlemen Sportsmen" was suggested to my mind by reading the well-timed reply of "X" in regard to the Silver Lake performance. Why, Mr. Editor, the pot hunter, who hunts for the market as a means of support for himself and family, is a prince in comparison with some "Gentlemen Sportsmen" we read about.

Not long since your paper contained an account of a party who made a trip through Maine—among them a notable author of works on sporting—where it was stated that he bagged fourteen deer, closing up their performances Oct. 5. This party had commenced the 15th of September, but they did not state how many of them were shot during that month—the close season. It seems improbable the deer should have been all killed in October. If not, were they "gentlemen sportsmen?"

Men go out upon the prairies and shoot buffaloes for their tongues, leaving the carcasses to rot, or to be devoured by wolves; others enter into a competitive arrangement to see how many ruffed grouse, ducks, squirrels, woodcock, etc., they can bag in a given time, slaughtering indiscriminately everything their eyes rest upon. Are these "gentlemen sportsmen?"

I have known members of a Game Protective Association to shoot coots by the score for the fun of the thing, and bring them home to rot, sometimes making Sunday their special game day for this purpose. It is well seen that the birds should have at least a day's rest in seven, even during open season. Are these "gentlemen sportsmen?" But I will not weary you or your readers. As I before said, I am glad something is being done to elevate the moral tone of our people in regard to game. Let us all see to it that good laws are enacted and enforced, and frown upon and denounce, so far as our influence extends, the ruthless butchering of game that is not utilized for the food of man.

DECEMBER.

We have received the Constitution and By-laws with the Rules for Trap, Rifle and Pistol Shooting of the New York State Association.

MASSACHUSETTS—Fall River, Dec. 28.—At a shoot held by the F. R. Gun Club, Saturday, Dec. 28, the following scores were made. Card rotary trap, 18 yards:

First Match. Ten Balls.	
E. W. Burdett.....	10
W. J. Bralley.....	10
W. J. Nichols.....	10
J. B. Valentine.....	10
H. H. Braden.....	10
H. C. Bralley.....	10
T. Stanley.....	10
T. S. Hall.....	10

Second Match. Ten Balls.	
E. W. Burdett.....	10
W. J. Bralley.....	10
T. S. Hall.....	10
H. C. Bralley.....	10
J. B. Valentine.....	10
F. Macomber.....	10
J. C. Farwell.....	10
O. Daniels.....	10

Third Match. Ten Balls.	
E. W. Burdett.....	10
H. C. Bralley.....	10
P. E. Borden.....	10
T. S. Hall.....	10
H. H. Braden.....	10

Fourth Match—Team Match. Ten Balls.	
E. W. Burdett, Capt.....	10
W. J. Bralley.....	10
T. S. Hall.....	10
E. B. Borden.....	10
J. B. Valentine.....	10
J. C. Farwell.....	10
S. Allen.....	10
H. H. Braden.....	10

Fifth Match—Miss and Out.—Farwell, 5; H. C. Bralley, 5; W. J. Bralley, 5; Burdett, 4; Hall, 4; Valentine, 4; J. Borden, Jr., 4; Butler, 2.

Mr. E. W. Burdett made a score of 62 consecutive broken balls, missing his 63rd ball.

Physicians of all Schools use and recommend Hop Bitters; take their advice.

The Kennel.

Eastern Field Trials Club—Annual Meeting for election of officers January 11.

Pittsburgh Dog Show—Pittsburgh, Pa., January 17, 18 and 19, 1891. Entries close January 6. C. B. Elben, Secretary; Charles Lincoln, Superintendent.

THE COCKER CLUB.

AT the solicitation of numerous correspondents, who are interested in the proposed formation of a Cocker Club, seconded by the request of Mr. Geo. D. Macdougall, who has found the necessary correspondence much more voluminous than was anticipated, and a serious tax upon his time, the FOREST AND STREAM will undertake to do the necessary work preliminary to the actual formation of the committee.

The purposes for which the Cocker Club will be organized have already been set forth in these columns.

What we propose to do is this:

1. To receive the names of all persons who will express their willingness to join the Club. Having secured these,
2. To forward the list to each individual, that from it he may select ten candidates for a committee of seven, who shall then take entirely into their hands the further work of organization; the seven men receiving the highest number of votes to be declared elected.

It will be understood that we are the passive agents to facilitate the progress of the Club, and will have nothing to do with influencing its character or membership. We shall attempt simply to perform the labor so laudably undertaken at first by Mr. Macdougall, and had not that gentleman declined to act further we should not have assumed the task.

We trust that our call for the names of all sportsmen who are interested in the subject will be met by early and numerous responses.

Send us your own name and the names of those of your friends who are interested.

MORE ABOUT THE COCKER.

AS the "Cocker-Spaniel" is justly becoming the fashionable dog, and as every one seems interested in obtaining some standard by which they may be properly judged in the future, the opinion of an unprofessional, though a lover of good dogs, may not at this time be out of place.

For several years past I have been interested in spaniels, and have given some attention to them both in the kennel and the field. As a result of this experience I am satisfied that a spaniel will do as much work in Ohio, on turkeys, grouse, quail, woodcock, snipe and ducks as a dog of any other breed. They can be taught, according to the preference of the hunter, to point like a pointer or give tongue when they approach game, and are, withal, such busy little beings that it is a great pleasure to shoot over them.

A dog of the kind I have mentioned above I would call a cocker-spaniel, in the absence of a better name.

Cocker spaniels I would have divided into two classes.

1st. Dogs that give tongue.

2d. Dogs that point.

The weight of these dogs should be: For males in good condition, from 27 to 33 pounds; for females, from 25 to 30 pounds. The color should be liver black, lemon, or a combination of white with any of these colors. The coat should be moderately long, slightly wavy but not curly, and not too fine. What I consider a model dog, in fine flesh, measures as follows: From tip of tail to nose, 37½ inches; tail, 17½ inches; chest, 22 inches; tape tightly drawn; height, 16 inches; from the tip of one ear to tip of other over the head, not counting feather, 15 inches; distance between centre of pupils, 2½ inches; from tip of nose to beginning of forehead, 3 inches; coat, dark liver, rather coarse, but very glossy; length of hair along the back, from 1½ to 2 inches; ears, legs and tail only moderately feathered. His weight is even 80 pounds. His chest is large and hind quarters light. Such a dog has the endurance of a bound, and beauty unsurpassed by any member of the canine family.

In the parlor or the field such dogs are equally at home, and for general purposes "take the cake." Let the admirers of smaller and larger dogs hunt classes for their pets, or abandon them. My object with the modern cocker spaniel is to obtain the smallest possible dog that can and will do the best possible work in the field. I do not believe breed shows can ever establish a standard for a hunting dog, nor can limited field trials do it. A compilation of the opinions of sportsmen competent to judge will be the only means of arriving at a solution of this difficult but important subject. M. D. Circlelle, O.

Now allow me to say to all that just so long as this feeling of distrust and jealousy exists you will waste both your time and patience, and eventually you will be carried out to sea by the undertow. It is all folly to think you can make a standard, and to suit the fancy of any particular strain of cockers; for who has a strain that he can claim as his own production? In fact, to make it more plain, I will ask the question openly to you all, Is there a breeder in America or elsewhere who has a breed of cockers that is easily identified among an open number of ten or more spaniels as belonging to any man's kennel, or is the acknowledged fruit of any breeder's careful study and unceasing labor? When you all think the matter over candidly, I believe you will agree with me in saying that there is not. Breed your spaniels to the high standard of perfection, which is shown in the Laverack setter, and neither yourself nor the world at large will find a standard or other guide to mark out its redeeming qualities. We need more good spaniels far more than we do a standard to judge them by. You will find by experience that a standard will not improve your dogs any. That must be done in a far different way, and I believe you will agree with me in saying it is much easier to make a list of rules to follow than it will be to follow them. At least I will venture the assertion that many of you who are so enthusiastic in hurrying up the matter of making a standard will lose all interest in the cause if you are so nobly defending now if you were to try for a couple of years at producing some particular marking in order to establish the above-named title to a strain. That is the labor and worry of a lifetime not to be gained in a day, no matter what your starting point may have been. The works of nature are fickle indeed.

There are a great many who claim to be breeders, but their experience is very limited indeed. They are breeders something like this: For example, they will purchase a half dozen or more bitches for the brood that are called good, of all weights and all colors; have also a stud dog without any knowledge of his lineage and breed him to the lot. From these unions they produce everything that looks like a dog. Would it not be better to begin with first knowing what they wanted to produce and then try to produce it and keep trying until they succeed?

Another will pick up some nondescript book on the dog, read it and have all the knowledge that requires. As, for instance, one writer says the more prominent the eyes appear, especially when accompanied with tan markings, the greater the suspicion of the King Charles cross; and the greater the number of ticks over the face, legs and body the greater quantity of Norfolk blood does the animal contain. Now, when any party puts in claims of that sort I say he is not a breeder. What is a cocker to be like in his eyes? Are they small or sunken and blood-shot, like a blood-hound? And again, must the King Charles blood be brought out and marking? I have never heard the claim out against the Gordon setter. One would be fully as consistent as the other. And in regard to ticks, what is more handsome or beautiful than a well proportioned cocker, with liver head and ears and a body white ticked, with liver throughout? And this can be produced and has been, but it does not follow that they must have the broad muzzle or be mute, as in the case of the Norfolk or Clumber spaniel. That is not breeding, it is forging. Again, I can't see the authority for placing large spaniels in the field class, as Mr. Fellows says, where they belong, with very few exceptions. I think the rule laid down by J. F. K. to be a very good and reasonable one, and I can see nothing in it, intentional or otherwise, to either injure the business financially or the mind of the most fastidious. The changes I would make are in feathering. If a dog is to be used in the field it is easy to clip his feather, and you will certainly injure the value if you remove any point that adds to his beauty. And furthermore, if you tamper with the colors you are tampering with the standard. I would like very much to meet some one in an argument on some future time on a subject that seems to be harrowing up the souls of a few fanciers; that is, the origin of the King Charles spaniel.

BRETT HOLLS.

After having read all the letters that have appeared in your paper relative to cocker spaniels and the proposed standard for judging them I think the letter of "Senex" in your issue of the 2d inst. has solved the problem. The majority should rule in all cases, and if the proposed committee is appointed as he suggests, the said majority will be satisfied. The proposal of "Leam" would only make matters much worse than they are at present, because the opinion prevails that the whole thing will be managed by a few interested persons in your city, and the consequence would be that if his idea were adopted, many noted breeders and others would not only object, but would hold aloof from the proposed club. I hope, therefore, that the duty of issuing a circular in each number of your journal will not prove too onerous a duty for you, and we all will, of course, pony up to meet the expenses. My share is ready whenever it is asked for. Perhaps it would be advisable to publish a list of all the best breeders with their post-office address in the FOREST AND STREAM, so that we can post ourselves as to who is the best qualified to act on this committee. Toronto, Dec. 8.

As breeders we feel deeply interested in the controversy going on in the columns of the FOREST AND STREAM on the modern cocker. We need not give our opinion on what constitutes a cocker, as there has been enough already said on that point for the present, but would take the shortest possible cut to bring about a permanent standard for this fast coming dog, and to bring this about would indorse "Senex's" plan, which was to have circulars gotten up by the editor of FOREST AND STREAM, and sent to all the best breeders in the United States, and the three men that got the most votes to be the committee of three to establish the standard. This seems to us a fair and just way to bring this matter about. Would recommend that we elect men that are not only fearless, unselfish, honest men and thorough good judges of the breed in question.

Would take Stonehenge's "Dogs of the British Islands" for a guide, and improve from that as best we can. We hope and trust this good work will go on and give this most beautiful and useful of all sporting dogs an equal chance with other breeds of dogs. C. B. C.

South Acworth, N. H., Dec. 23.

I was very much pleased with the pictures of the dogs in your last issue, and have often wondered why there are not more of them. It is a good way to educate the readers up to the standard of the breeders. We cannot all reach the bench shows, and now that the little cocker is before the house for discussion, why don't the breeders of this useful dog give us the pictures of their ideal cockers, and let us pass judgment on them? We are all interested and anxious to see the different shapes advocated by the several breeders. I always supposed that the cocker spaniel was a well defined breed, and was really a miniature setter or a setter on short legs, but it would seem by the letters written upon the subject, and by the dogs I have seen in the bench shows, that almost any small spaniel would pass for a cocker. I have seen them with Blenheim heads and water spaniel coats, and all sorts of mixtures and crosses between the field, water and King Charles breeds, classed as cockers, and I begin to think that I do not know much about the breed. I always had the impression that the spaniel in color should be white and orange, like the clumber, and that the liver showed previous crossing with the water spaniel, and the black some distant cross with the English retriever. I should very much like it if some one who has the ability would just take hold and straighten out the business through the columns of your paper, if you can give the space.

ERNE.

I think your correspondent is going too far when he wants to make the "Cocker Club" all sportsmen who are breeding or owning cockers, for there are a great many sportsmen like myself, who own a few setters and pointers, that would like to join a club of this kind to become better acquainted with these little fellows. And are we all to be fired out simply because we own no cockers "and do not know one from a mongrel bull-dog?" C. E. S.

Schenectady, N. Y.

Editor Forest and Stream:

In answer to "Cave Canem," and to defend my expressed wish to have two classes for spaniels, large and small, I have a few quotations from English fanciers, breeders and judges. In a general letter on spaniels in "Dogs of the Day," of September, 1880, "Surefoot," known to me as the greatest living breeder of spaniels, having won everything the last few years, says, after naming the several divisions of the spaniel family: ".....they are divided into two classes, large and small—the large are termed springers, the small, cockers; both sizes may be produced in one litter by the same parents." And again: "The small spaniel, or cocker, may be almost any color, black, black and white, liver and white, lemon, lemon and white, or only mottled. The head should resemble that of a small setter and have no tuft upon it; the ears should be moderately long and lie well to the cheek. The legs should be strong, well feathered and short, the feet round, and each toe should be protected with hair, a plentiful distribution of which on and between the toes is important; the chest tolerably broad, the body long and barrel-like, the stern should come out on a line with the backbone." From "British Dogs," by Dalziel, I take the following: ".....if the present fashion is to be maintained—the prejudice in favor of black color, long backs and setter-like heads—I plead for two classes at all shows. One class for other than self-colored dogs, representing the old springer, and weighing over say twenty-five pounds, and a corresponding class for cockers weighing from eighteen pounds to twenty-five pounds. Small-sized spaniels weighing from twenty pounds or even less to twenty-four pounds, and of all colors, liver, black, white with liver or black, and in these ticked or mottled on face, legs, etc., are still pretty numerous. I think we should have classes for liver colored cockers to include the Welsh or Devon varieties, and also one for those of mixed colors, the maximum weight in each class to be twenty-four pounds." He also gives measurements of two liver and white cockers: Nell—weight, 13lb.; height, 9in.; length, 30in. Flo—weight, 23lb.; height, 10in.; length, 29in. To another gentleman, who is well known and judged the spaniel classes at different large shows writes, but not quite which he calls the best black cocker he ever saw—"such is not worth 4—here, as the long, low black spaniel is able to win everywhere"—showing that there is no definite standard in England any more than here for cockers.

Yet "Cave Canem" says that there is a standard, and that one might as well start to argue as to what is a cow as call into question what is a cocker.

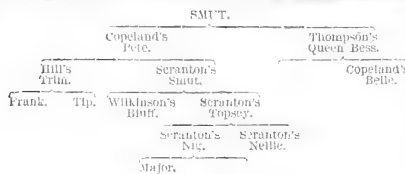
I have named my kennels and myself to Whitestone, L. I., and in future my address will be as below. Dmo.

P. O. Box 13, Whitestone, L. I.

HORNEVILLE, N. Y., Jan. 1.

I wish to say a few words to the friends of the cocker. I have given the subject much time and have read all that has been written, and I find that no two authorities agree on what a cocker is or should be. Don't be jealous and by so doing spoil all chance of having a standard. If we do have a standard made you should be able by careful selection to breed to it in three or four years, and if the standard does not happen to fit your stock, surely no dog will be hurt. By having a standard you will know what you must have if you wish to exhibit with the chance of taking a prize. No men who have a horse or dog think they have the best, no matter if the horse is only fit for the crows. They think if they should let him go he could do a mile in 2:30. It is just the same with a dog. If they exhibit and get beat they rush into print, cry "Fraud!" "Poor judges," etc.

Your neighbor may have "nodules," "bullfoundlands," etc. or a weight fifty pounds and have topknobs like Barney and Sinbad, but he calls them cockers and exhibits them and takes first prize over your pride and ideal cocker. Now if we have a standard the best dog according to the standard must win. Nearly all of your correspondents are of the same opinion, that we do need a standard, but at the same time seem to be afraid that it might not fit their stock. It is a pertinent question I should like to ask why is all this opposition to having a standard? I think I can answer it myself. It's dollars to butts, simply because he has none of the bestor strain, and did not see fit to buy of those that did have them. You will observe that all that are named for a standard have the bestor strain or its variations. I think it was a kind act of "Bide" to accept the offer; very true would take the trouble without being paid for it, and certain-



DR. LYMAN'S POINTERS.

TWO of the finest pointers that have been imported to this country during the last year belong to Dr. C. P. Lyman of Springfield, Mass. The brace consists of a dog, Bob, and a bitch, Ruby, own brother and sister. They were born about September 1, 1880, and had the famous English pointer, "The Duke," for sire. They were bred with sensation, and been handled by Mr. S. T. Hammond. Both dogs are said, from the trials that have been given them here last autumn, to be rare field dogs, and it is with pleasure we subjoin the pedigree and certificate of their trial in England to the names of their brother and sister. In particular, and we congratulate Mr. Lyman on his purchase.

CERTIFICATE OF TRIAL.

BRANDALE LODGE, Kirby Moorside, York, England,
September, 16.

Professor Vaughan, Edinburgh:

Sir—I beg to say I have given your pointers, Bob and Ruby, a thorough trial before three well known sportsmen, Lord Helmley, Lord Castlereigh and Lord Arthur Somerset (who have shot grouse over them). They were pronounced by us all to be thoroughly broken and in every way a capital brace of dogs. I have the honour to be, sir,

Your obedient servant,

(Signed.) G. HOLDING,
Head keeper to the Rt. Hon. the Earl of Faversham.

ENGLISH POINTER DOG BOB.

DAM. Mr. Ainsworth's Beauty, by Lord Stamford's Hunter, out of the Duke of Athol's Rose, by Drake out of the Duke of Argyle's Ruby.

Whelped 1877, own brother to Ruby (K. P. R. 136).

COLOR AND MARKS.

Bob's color is medium liver and white. He has marks on cheeks, forehead and ears, the Mesian line of division being waved. There is a separate mark on right side of nose extending to nostril. A patch behind shoulder on each side, the right one higher up than the left, also one on the loins toward the right side. A patch at root of stern extending down right flank. He is ticked on back and limbs.

igned.) J. VAUGHAN,

Witness:--(Sd.) T. H. LEWIS,
Gayfield House, Edinburgh.

THE IRISH SETTER.

[Reprinted from advance sheets of Vero Shaw's "Book of the Dog," furnished to the FOREST AND STREAM by the author, through Cassell, Peffer, Galpin & Co., publishers, No. 596 Broadway, New York.]

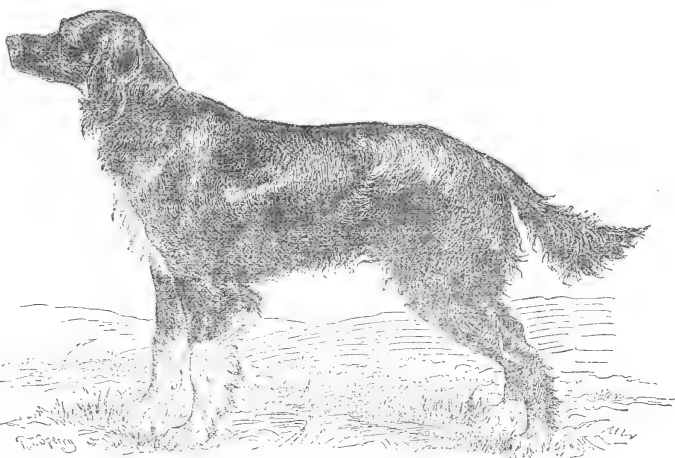
THE origin of the Irish setter is, like that of other breeds, buried in an obscurity from which it will never emerge, in spite of the many theories which have been propounded concerning it. The peculiarity of its coloring renders this dog distinct in itself, and it is more than possible that it is some way descended from the liver-hued setting dog which is referred to by Gervase Markham in his "Hunger's Prevention."

As a matter of fact the earliest mention that we have been able to discover of any setter peculiar to Ireland is in the "Sportsman's Cabinet," where, in the chapter on English setters, direct allusion is made to this breed of dog in the following words:—

"The sporting gentlemen of Ireland are more partial to setters than pointers, and probably they are better adapted to that country. The fields in many parts of Ireland are large, very rugged and stony."

This clearly proves that at the beginning of this century the setter, in some shape or other, was identified with the Emerald Isle. It is greatly to be regretted that no mention is made of the appearance of these dogs, as, if there had been anything of the kind, a good deal of light might have been thrown upon the question of the present existence. It is somewhat remarkable that in the cases both of the setter and the Gordon setter so great a difference of opinion should exist among their supporters on the subject of color. The controversy on the Gordon setter question has already been done justice to; but, on approaching the Irish setter, we are met with almost identical difficulties. As in the case of the Irish, opinions are mainly divided on the question of white. The Irish setter is said to be a pure-furred Irish setter or not was, at one time, a very important feature in discussions on the breed, and we have of late years even heard it maintained that white marks should disqualify an Irish setter in competition on the show bench.

Naturally, such extreme opinions as the above are shared by only a very limited number of breeders, as it is more than questionable whether any strain of Irish setters is entirely free from white. Solitary specimens of the breed are, however, not infrequently met with, and should never be taken as a certainty in breeding that the offspring of two colored dogs will themselves be of that color wholly unmixed with white. A very large number of experienced breeders have written from time to time most strenuously in support of the introduction of white into the breed, and have given it not only as their opinion that the mixture of colors is more taking to the eye, but also as the positive proof of purity in the blood. However, for our own part, we think that the introduction of our affections lie in the direction of a whole coral red dog, and that we think the less white an Irish setter has about him the handsomer he is. So much in modern times depends upon appearances, and there are so few opportunities for satisfactorily testing the merits of a show dog in the field, that the question of his beauty is of far greater importance than it was formerly. Brightness of color is, therefore, not, then, be thought that because the fashionable Irish setter color is red, the red-and-white dog should not be encouraged; to, for begin with, the two colored dogs of certain strains are



MR. BLOODGOOD'S NATIVE SETTER NAT

just as likely to throw pure red puppies as the self colored dogs themselves, and, in addition, they are just as handy in the field. We, therefore, are strongly in favor of due encouragement being given to the red-and-whites by the committees of dog shows throughout the country.

Mr. Maedons certainly seems to share our opinions on this subject, for he writes as follow:—

"In Ireland, America and Germany, at the great dog shows, there has grown up a strong inclination to mark the Irish setter as an exclusively red dog, and to allow no white whatever to appear. This is all very well if it is thought desirable to establish it as a new breed and to frame modern rules for judging them, etc.; but some of the finest types of the old breed had a fair share of white on the face, neck and feet

"For endurance no setter can compare with the Irish. They are quick as lightning; but their pace never gets beyond their nose. True, unless they are extremely well-bred, they are so wilful and headstrong that they require much breaking, and often to be broken a little every year, but when well-bred not much breaking is needed. (By-the-by, I much prefer the American term "trained" to breaking, as it implies a much more rational treatment of dogs to train than break them.)

"The Irish setter has certainly more dash and go than the Gordon, but for this reason he is the more headstrong, and therefore more difficult to control, and hence it may be his victories at field trials are as few and far between as the Gordon, even less, for I find only one Irish setter a winner at field trials: this was my young dog, Plunket, in the spring of 1870, when he won, as a puppy, second in the Shrewsbury and Birmingham trials, and finally after a year or more, at Newellin, considered a long price in those early days. Mr. Newellin, I believe, sold him afterward to an American for \$300."

Another powerful argument in favor of the red-and-white color is to be found in the illustration of the three setters which has been given before and alluded to in the Gordon Setter chapter. The middle dog in the old plate is colored red, with a distinct blaze of white up the face. This must prove that there was a red-and-white setter in existence somewhere in 1805, as to artist such as Mr. Svenhman Edwards, who is responsible for what appears in "Cynographic Britannica," from which the illustration is taken, would be likely to omit a prominent feature of the dog. The red-and-white signs of the blaze, too, are so conspicuous as to exceed the amount permitted by some opponents of white markings, who, though strongly objecting to the presence of any white at all, admit that they would not absolutely qualify an otherwise good dog because he had a tinge of white up the head, chest or feet. Having thus drawn full attention to the question of white in the Irish setter, and given it as our opinion that, though the wholly blood-red is more preferable, the parti-colored dogs should not be discarded, or rather, rather than to discuss the question of the proper point in connection with the color of the breed which has from time to time evoked correspondence in the public press.

The desirability of a tinge of black along the back and around the edges of the ears has been keenly argued by several writers and experienced breeders supporting the introduction of these features, which they affirm is very frequently to be met with in many principal strains of Irish setters of undoubted purity. The vast majority of admirers of this dog, however, unite in deprecating such fancy markings, and their views, backed up by common sense, must certainly command respect.

D-tractors of the Irish setter are accustomed to make much capital out of the dog's headstrong nature, and no doubt there is a considerable foundation for their hostility to him. In comparison with the other breeds of setter the Irishman is impetuous, and if not kept in constant work often requires re-breaking, and on this account has made many enemies of those sportsmen who, under other circumstances, would have been his friends. He is not a dog to be trusted to work constantly worked or he will soon be useless in the field; but if care has been taken with his education—and he is naturally a generous dog—an Irish setter is no mean companion to the sportsman. He is active, intelligent and possesses great pace, and is not at all of a jealous disposition. His constitution, too, is, as a rule, far superior to that of the Laverack, with which he has often been crossed. The advantage of this cross has been recognized by many eminent authorities, and Mr. J. C. Laverack himself spoke of such an experiment as follows:

"So highly do I value the true blood of the Irish that I have visited Ireland four times for the express purpose of ascertaining where the pure blood was to be found, with a view of crossing them with my Beltons. I very much regret to say that, after all my troubles and efforts, I found that this fine and magnificent old breed had degenerated, owing to the

carelessness and negligence of the Irish in not having kept it pure."

In our opinion, it was chiefly from a desire to improve and strengthen the constitution of his breed that Mr. Laverack was in favor of an Irish setter cross; for it is more than probable that his practiced eye was beginning to see traces of that delicate constitution which so injured his efforts later on. It is a fine cross, and a more numerous one than is advised, for the hardy, upstanding Irishman would most certainly correct the weakness of the Laverack in this respect. In spite of the disclaimer on the part of Mr. Laverack, it is almost beyond a doubt that some of the followers of his setter have really crossed the Laveracks with the Irish, as unmistakable signs are often seen in so called pure bred Laveracks. It is not, however, a cross of the Irish setter with the Laverack, but the other way, though it is more than probable that the introduction of Irish blood has caused the Laveracks to be fiercer and harder to break. Mr. Laverack, in writing of a famous setter of the former breed which he saw at Cocker mouth Castle, alludes to the dog as follows: "The most magnificent specimen of an Irish setter I ever saw. This dog was of a fine size, and of a fine shape, his neck was thick and his shoulders, wheeled or roached back, very deep and broad in the chest, remarkably wide behind the shoulders, and very short in the back and legs, more so than any Irish setter I ever saw; he has an immense profusion of coat, with a tinge of black on the tip of his ears. I should have bred from this dog, but for the following reason, and I think I was right: he was not able to break him, and his stock were frequently black."

This brings us to the consideration of another cross to which the Irish setter has been subjected, though it is one which has almost certainly failed to improve this useful and handsome breed of dog. It is an unquestionable fact that Gordon setter blood has been largely introduced into many strains of Irish setter, and the result has been much injury to the latter breed. The presence of Gordon blood has, we have no doubt in our mind, done much to impress upon certain breeders the importance of the black or deep-colored fringe to the ears or trace down the back; but this is nevertheless, in our opinion, a most unfortunate and far-reaching indication of a cross to be avoided. Another fault in this breed is the dock, in which the Gordon cross is very wont to claim its presence, is in the ears, the heavy "saddle-flap" ear betokening the bar sinister beyond a doubt.

[TO BE CONTINUED]

TRANSPORTATION TO PITTSBURGH.—Mr. L. P. Farmer, General Passenger Agent of the Pennsylvania Railroad, has exerted himself to afford every possible comfort for traveling sportsmen on their way to and from the Pittsburgh Dog Show. Men and dogs fare well on this well-equipped line.

NOTICE.—Will the gentleman who purchased a red Irish setter dog of F. A. Chester or J. C. Fowler, Modus, Conn., please send his name and address to this office?

LOST.—Mr. Fred. Raab, of Hoboken, N. J., lost, three months ago, his black, with white spot on breast, setter dog Tanner, aged five years. Any information regarding him will receive a suitable reward from his owner.

MR. WYMAN'S COCKER FLO.—We have received here from the owner a very spirited photograph of the very pretty little cocker bitch Flo, the property of Mr. T. H. Wyman, Sebec, Maine.

RATTLER.—Mr. C. H. Goodman, of Springfield, Mass., has been offered and refused three hundred dollars for his pointer dog Rattler.

Mr. R. M. LIVINGSTON'S BULL BITCH.—We had a very pleasant call from Mr. Livingston, of this city, who brought with him his recently-imported bull bitch. She is all that has been claimed for her.

PENNSYLVANIA DOG SHOW.—From the large number of applications we have had for premium lists and entry blanks we should judge that the show will be larger than at first anticipated. Remember the entries close to-morrow and that Mr. Lincoln's address is Box 303, Pittsburgh, Pa.

MASSACHUSETTS KENNEL CLUB.—At the annual meeting of this organization, held at Boston last month, the following gentlemen were re-elected for this year: Mr. John Futtler, Jr., President; Mr. T. T. Sawyer, Jr., Treasurer, and Dr. E. J. Forster, Secretary, 22 Monument Square, Boston, Mass.

Lost.—Mr. Will H. Atlee, Fort Madison, Iowa, has lost his liver and white cocker dog pup, four months old. He has four white feet and white belly; eyes, light. Mr. Atlee purchased the puppy from Mr. McKoon last September, and as he values the dog very highly trusts that this notice may lead to his recovery.

How It Works.—*Centipede, L. I., Jan. 3.*—Editor *Forest and Stream*. Please withdraw my advertisement from the paper, as I have already received answers enough to fill the number of dogs I intend taking South with me. I expect to go to North Carolina on Wednesday.

A SQUARE REPORT.—*Boston, Mass., Dec. 19.*—Editor *Forest and Stream*: The reason why I now subscribe to the *FOREST AND STREAM* is because of your report of the Eastern Field Trials. I have never had much faith in the justice of either bench shows or field trials, believing that as a general thing they have been guided and controlled by a clique as an advertisement for their own breed of dogs, and not in the interest of the public. As long as we can have upright reporting like yours let field trials continue. Though Sensation got a place, the glory is with Smut. Though Gladstone took away the prize, the honor is with Nat. RIGHT AND LEFT.

KENNEL MANAGEMENT.

41 C. A. S., Sloansville, N. Y.—I have a hound two years old afflicted with worms. Please send me a remedy. A new one medium is a sure cure for all kinds of worms. For stomach and round worms give twenty-five grains of freshly-powdered area nut with four grains of santaline, after fasting dog for eighteen hours. Repeat dose in a week, and several hours after each dose give half ounce of olive, or castor oil. For pin worms give injections of salt water, and give internally for three days a dessert spoonful of table salt once each day.

42 A. P. S., Boston, Mass.—Your dog has rheumatism. Give as much Rochelle salts, two or three times a day, as the dog will bear without purging. Keep him out of the snow and wet, and have a warm and dry bed for him to sleep in.

43 T. G., Erie, Pa.—From your description your dog has worms. Give the following vermifuge in a little milk after twelve hours' fasting: Powdered area nut, one and a half scruple; santaline, three grains. Repeat the dose in a week. Each dose to be followed several hours later with half ounce of castor oil. Also give dessert spoonful of cod liver oil twice a day.

KENNEL NOTES.

. Breeders and owners of sporting dogs are invited to send memoranda of names claimed, bred, whelps, sales, etc., for insertion in this column. We make no charge for the publication of such notes.

THE ICE YACHTS.—The ice north of Poughkeepsie Ferry is covered with five inches of snow, interfering with sailing. South of the ferry there is a fine track with smooth surface, and it is hoped that the next frost will materially enlarge the field. A number of yachts of the I. Y. C. have been under way. Next week we will publish some further details and this season's racing fixtures.

NAMES CLAIMED.

Lightning—Mr. W. W. McCain, Rush, Pa., claims the name of Lightning for his lemon and white pointer dog, whelped August 1, 1880, out of Gardner's Mats by owner's York.

Joe, Jr.—Mr. John Lalatt, London, Ont., claims the name of Joe, Jr., for Irish terrier dog puppy out of Noah by Joe, purchased from Dr. J. S. Niven, London, Ont.

NAME CHANGED.

Gold Elsie—Mr. Richard Dorman, Cincinnati, Ohio, claims the name of Gold Elsie for red Irish setter bitch, formerly Rylla, out of Magenta by O'More.

Mr. Dew—Mr. J. Samuel Veal, Rome, Georgia, claims the name of Mr. Dew for his setter puppy out of Daisy Dean by Lincoln.

WHELPS.

Zip—Mr. C. H. Goodman's (Springfield, Mass.) pointer bitch Zip Snapshot-June, whelped Dec. 9, seven puppies by Rattler (Banger-Bess), five dogs and two bitches, all dark liver and white. None for sale.

Grace—Mr. N. Elmore's (Granby, Conn.) pointer bitch Grace (Sensation-June), whelped December 25, eight puppies, four dogs and four bitches by Gay (Snapshot-Fanny II). Four of the puppies are liver and white, and four lemon and white—all finely marked.

SALES.

Don Juan—Mr. Robert C. Cornell, of this city, has just purchased from Mr. L. H. Mayott, of Springfield, Mass., the lemon and white pointer dog Don out of Psyche II. by Sensation. Don was whelped August 7, 1878, and we hear that he is an excellent field dog.

John, now Gold Elsie—Mr. Richard Dorman, Cincinnati, Ohio, has purchased from Mr. W. H. Pierce, Peekskill, N. Y., the red Irish setter bitch Rylla (Rory O'More-Magenta).

Match—Mr. Robert C. Cornell, of this city, has purchased from Mr. John White, Bridgeport, Conn., liver and white pointer dog Match out of Grace by Sensation. Match is a well built dog, very much like his sire, and is litter brother to Gregory's Belle.

Kate—Hon. E. H. Lathrop, of Springfield, Mass., has purchased from Mr. Corcoran the dark liver and white pointer bitch Kate (Banger-Bess).

Tom Nellie Horton Whelp—Mr. G. E. Browne, of Dedham, Mass., has sold to Mr. P. Aldrich, Readville, Mass., a Gordon setter dog puppy, whelped August 11, 1880, out of Nellie Horton by Donnie's Tom.

Tom Nellie Horton Whelp—Mr. G. E. Browne, of Dedham, Mass., has sold to Mr. H. Sawyer, Charlestown, Mass., a Gordon setter puppy, whelped August 11, 1880, out of Nellie Horton by Donnie's Tom.

Belle—Mr. N. Elmore, Granby, Conn., has purchased from Mr. J. N. Dodge his prize winning English beagle Belle (winner of first prize at Philadelphia and Boston, 1879). She is thirteen inches high, ears spread seventeen inches and is illustrated in "Celebrated Dogs of America."

Nellie Horton-Tom—Mr. G. E. Browne's (Dedham, Mass.), Gordon setter bitch Nellie Horton (Mum's Duke of Gordon-Tilly's Dream) to Donnie's Tom (Stockton's Dash-II. Smith's Fly) on Dec. 25, 1880.

Eileen—Don Juan—Mr. R. H. Hamilton's Eileen to Mr. Robert C. Cornell's lemon and white pointer Don Juan (Sensation-Psyche II).

PRESENTATIONS.

Gordon Setter Whelp—Mr. James Moore, of Toledo, Ohio, has presented to Mr. E. H. Gilman, of Detroit, Mich., a Gordon setter puppy five months old sired by Grouse.

STATEN ISLAND has a game league.

That low, nervous fever, want of sleep and weakness, calls for Bitter Waters.

The Rifle.

THE GUN TRAVELER'S DINNER.

THE Holiday season had one affair of festivity which was certainly novel, for the like of it had never been seen before, and its occurrence betokens a very near approach of the millennium: it was the dinner of the "Gun and Revolver Travelers." In other words, a baker's dozen of the drummers who go up and down the face of the land, intent on scattering thistles of beauty in the shape of fine guns and those beastly little verminous reptile pistols, forgot business for a time, forgot that they were bitter rivals, forgot that there was any such purgatory on earth as "the Road," and spent a jolly evening together and parted wishing for many happy returns of the same.

The suggestion that it would be a good thing to have a social time together came as a happy thought to one of three or four of these commercial travelers as they met in a haphazard fashion at St. Louis. "We'll do it," was the response, and on the 30th ult. they did indeed carry out their plan, and at the establishment of ye host Emile Heine, 47 E. 10th st., they sat down. It was not a large assemblage, Heaven be praised, for many more of these purveyors of empty guns that go off and bring sure death would have no fools to be counted at the next census. But there were enough of them to be responsible for the scattering of half a million pistols and revolvers over the land each year and set statisticians to wondering where all these bits of mechanism go. "After the pins," says somebody; but that is only dodging the question, and we propose the communique now as a tough nut for the next dinner of the Associated Travelers, when the Lyon may try his teeth on it and the lice hunting peck at it.

The Travelers made a very good beginning on what may prove an endless series of annual reunions, and while showing themselves the very best of attention did not forget to invite a representative of the *FOREST AND STREAM* to enjoy their frugal fare and sip the nectar from the same decanter. There were fourteen of the Travelers around the board. "Eh! Gad," said the ancient of the party, "how lucky it is I am not absent, for you never could have dined with thirteen at this table." Not one of them had a brace of horse pistols thrust under the flap of his claw-hammer, and some of them might have passed for theological students. They were voluble, of course, and almost as noisy as the wares they dealt in. The shot now and then popped up and there was no end of trade jokes, while a drummer for Dittmar powder would no doubt have been welcomed as a peg on which to hang all the thrusts of the evening. No such spectacle came to the board, however, and for five hours it was all fun, feed and frolic.

The list of diners included H. F. Rice and Wm. Fischer, representing Schoverling, Daly & Gales. Wm. Bunting and S. Gorton, representing T. G. Conway. J. Malby, J. Henley, J. W. Curtis and M. Herzog, representing Malby, Curtis & Co. Mr. Sylvester, representing Hartley & Graham. W. M. Calhoun, representing Herman Boker & Co. Chas. Fraser, representing John W. Hutchinson. P. Lyon, representing Merwin, Hulbert & Co. Ed. Struller, representing Struller, Law & Co. and Frank Gutterson, representing Graham & Haines.

The menu was a novelty in its way and we reproduce it entire, leaving our readers to laugh over it with as much gusto as the gun drummers themselves when each of them saw it for the first time at table and began to run over the items. It has a strange gingle as though a cook book and a small-arm catalogue had concluded to amalgamate, and some of the offspring will be recognized as having a pun-gent flavor, and some of the party, we fear, found more truth than fiction in the names of central-ire champagne, back-action Burgundy, swell-head whiskey and solid-striker beer.

Central Fire Turtle. SUIT. Boom Bann.

FISH.

Filet of Sole (up in arms and eager for the fray) a la Napier.

Blue Jacket (Tried, Tired, Tattered) a la Bunting.

Red Jacket (Snapper English Twist Sauce) a la Bunting.

Seven Shot Bass, Saw Ham Sauce.

BOILED.

Leg of Mutton, Rubber Stock Calhoun Capers.

Turkey, Ely Ward Stuffing.

Leg of Ham, B. G. L. Sauce, a la Keller.

Tongue, Hamrod Dressing.

* Pioneer, Folsom Style, Colt Double Action Sauce.

ENTREES.

[Rice] Croquettes Standard Sauce, Diamond Dill Raisins.

Lyon Steak Pie, Army Style, XL. Enamelled.

Marquis of Lotties Patties, [Fraser], Wind Sauce.

Retriever Chip Beef, Ryan Cream.

Forehand and Wadsworth Omelet, [Moore], Rum Sauce.

Gutted Sausages, Bang Up Sauce.

Stewed Robin Hood, Connecticut Style.

Little Giant Pancakes with Bacon Syrup.

Prairie King on Toast, with Caramel Salad.

ROAST.

Gipsy Steel Chicken, Malby Sauce.

Extension Ribs of Beef, Laminated Gravy, a la Richards.

Patent Fore End of Lamb, Damascus Gravy.

Pistol Grip Veal, U. M. C. Sauce, a la Sylvester.

British Bull Dog, 44 Calibre Dressing.

Breast of Lamb, Reverse Nipples.

VEGETABLES.

Pin Fire Potatoes.

Pistol Grip Corn.

Stewed Patriot Tomatoes, Ivory Stock.

Patent Plunger Cauliflower.

Side Snap-String Beans.

Creedmoor Long Range Onion, with Brown's Cleaners.

RELISHES.

Blue Whistler Mushrooms.

M. and H. Automatic Chow Chow.

Czar Celery, T. and K. Long Barrels.

Defender Salad, Hand Cut Dressing.

Compensating Lump Salad, with Rubber Pad Dressing.

N [ero] G [orton] Olives, a la Hermann.

Winchester Ribs Sauce.

S. and W. Pickles, a la Robinson. Net 30 days.

Eclipse Sardines, Reverse Worms.

DESSERT.

Top Snap Pudding. Dedham Sauce.

Swing Cylinder Pie, Fluted.

Remington Pie, Long Range.

Rupertus Single Barrel Tart, Full Nickel.

Rebounding Lock Blanc Mange, with Parole Cream.

Molawh Ginger Snaps (Last Appearance).

Italian Concoction, 7 Shot.

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The coffee reached, speeches were in order, and one brave fellow had evidently been coquetting with the muses and broke out in verse and then had a sudden attack of modesty (greater wonder still), but our readers and our space are spared. One of the toast-framers went one step beyond the sublime and may have hit very near the truth when he wished for the time to come when every man should have his gun; and displayed a blind trust in Providence when he added "and may there be birds enough to go round." There was no end of stories of travel, for the men had just gathered in from Maine on the one side and Oregon on the other, while one of the party had just been outlining fun for the alligators by negotiating a sale of pea-shooters with Florida firms.

It was resolved to form an association to be known as "The Gun-and-Revolver-Travelers-Once-a-Year-square-mile-Association" of which Mr. Rice was elected President, Mr. Halty Secretary and Mr. Calhoun Treasurer, with Mr. Bunting as Sergeant-at-Arms.

HUNTING RIFLES.

PAGOSA, Col., Dec. 12.

SOME very interesting articles have appeared in your valuable paper recently on the Hunting Rifle. I notice many very different ideas as to the best rifle, and I think the very wide discrepancy arises mainly from the writers advocating the best rifle for their hunting locality, overlooking the fact that the gun for one section may not be the one for another, where the topography of the country and the game to be killed may be entirely different from the first. The best game-killing rifle I suppose ever used was the large bore rifle, 16 to 12 shot-gun gauge, with round ball and four to five drachms of powder, used by the British sportsmen in India twenty years ago, the spherical ball producing more "shock" and killing deadlier than the same amount of lead in a conical form, and the trajectory being very flat for shooting in forests. But rifles like these are not made in the United States, and it is of American rifles for American hunting that I write.

Rifles for hunting in the United States can be generally divided into three classes, according to where they are to be used:

1. A rifle for hunting in thick timber, especially in the South (though this rifle will do for all forest shooting in the United States). The range in the thick woods of the South will not generally be more than 100 yards, and rarely 150 yards. The game hunted are deer, wild turkey and black bear. The best cal., 40 or .44; I prefer the latter. From 50 to 60 grains of powder I think ample for this rifle; more powder only makes the recoil greater, and I must confess a great dislike for a kicking rifle. Again, 50 or 60 grains of powder will kill just as quick at the short ranges mentioned as 100 grains; and with a light bullet, 25 grains to 300 grains, will give a flat trajectory, which is so important in a hunting rifle, especially one of this kind, where such a small object as a turkey's head is so often the mark. I dislike greatly heavy bullets of 450 grains, with their high trajectory at short ranges, causing such frequent misses. It's not the weight of the lead that kills. What we want is high velocity. For a rifle of this kind elevating sights are hardly required, but it's not amiss to have a 200-yard leaf for occasional use. I prefer in this rifle a short barrel, about 26 inches. A short rifle can be got on game, especially running deer, much better and quicker than a long barrel, as in shooting in thick timber there are not many opportunities to get more than one shot at a time. I like the single shooter better than the repeater. It's simpler, can be loaded quick enough, and, having fewer and simpler parts than the repeater, is not so liable to be injured by the rust which so quickly attacks a gun in the South.

2. A rifle for hunting on the plains; the game antelope and buffalo. The typical game of the plains is the antelope. No animal is so wary and shy as antelope where they have been much hunted, and no animal that I have killed is generally shot at such long ranges. I have known them to be killed at 500 yards, and from my experience think fully one-half the antelope killed are shot between 200 and 300 yards. For such long-range shooting a powerful accurate rifle is needed with a flat trajectory, as distances are hard to estimate correctly on the plains—a barrel not less than 30 inch, cal. 44, 77 grains powder with long bullet, or cal. 40, 90 grains powder. Many of the plainsmen prefer the .40 cal., 90 grains powder to any other calibre.

3. A rifle for hunting in the Rocky Mountains. Here the shooting parties of something of both of the two preceding classes as far as range is concerned. You may have a shot at a black-tail deer at 100 yards away in the pine timber, or again you may have to shoot at a mountain sheep perched on some bare rock 300 yards distant. The game is the elk, black-tail deer, mountain sheep and grizzly bear. I have found that a rifle of this class should be more powerful than the first two described. A .50 cal., 70 to 90 grains powder I would prefer, though many use .44 cal. or .45. Many of these animals are tenacious of life and take much killing. In this kind of shooting, more than in timber or plain shooting, a repeater is desirable. I have often got several shots into a band of elk before they were out of range with a single shooter, and of course with a repeater could have done better. The Winchester have brought out a .50 cal., 100 grains powder, 300 grains lead, Express repeater. I have never seen the gun, but from descriptions it must be an excellent weapon for dangerous game. Personally I prefer a single shooter for general hunting purposes, but for dangerous game, or in a country where it's so cold that to load a rifle with half-frozen hands becomes a task, a repeater has advantages.

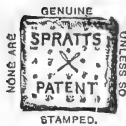
The three foregoing classes represent, I think, generally the

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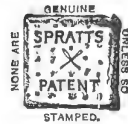
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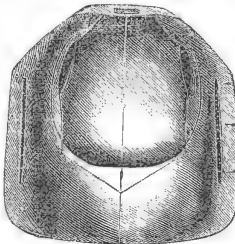
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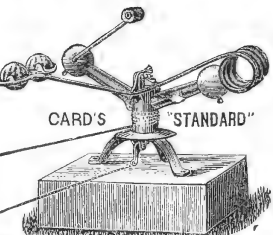
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THE AMERICAN SPORTSMAN'S JOURNAL.

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FOREST AND STREAM.

NEW YORK, THURSDAY, JANUARY 13, 1881.

IT SOMETIMES occurs that a subscriber receives an imperfect or mutilated copy of the paper. By returning it to us a perfect one can be secured in its place.

EVERY READER OF THE FOREST AND STREAM can show his good will by sending us the name of a new subscriber. The paper is one which each man who reads it can with good grace recommend to his friend.

THE COMMERCIAL ADVERTISER.—We notice with pleasure the prominent position held among the evening dailies of this city by our neighbor, the *Commercial Advertiser*. That journal, having just finished a prosperous season, is now entering on the eighty-seventh year of its existence as fresh and young as ever. Its circulation, we understand, and we can quite believe it, is growing weekly, and the clean appearance of the paper and the neat press-work reflect great credit on the business management. The columns of the *Commercial* are never heavy, but always cheerful, spicy and newsy. We congratulate our contemporary and wish it well in the future.

STATEN ISLAND GAME LEAGUE.—We congratulate the sportsmen of Staten Island on the formation of a game league for the protection of the game and fish of Richmond County. Mr. Francis Endicott is the President and Mr. Robt. W. Hopkins (P. O. Box 4,277, New York city) the Secretary. The new society has already begun the real work of a game society by securing two hundred quail to supplement another hundred presented to it by one of its members. The society hopes to have a thousand birds by the middle of February to turn out in the spring.

Carp have already been put into several ponds, and it is proposed, if the fish can be secured, to stock every pond on the island. There is abundant field on Staten Island for just such a society as this new organization, and the manner of taking hold of the work gives good promise that the members will devote their time to something besides dinners and trap shoots.

THE REFRIGERATOR AMENDMENT.

THE improved construction of refrigerators has introduced a new agent into the traffic of game and has very materially affected its destruction and consumption. Refrigerator cars convey tons of venison and other game from the localities where it is captured to the great market centres. Here huge refrigerators are prepared to receive and store it, or steamship refrigerators convey it to foreign markets. Where formerly pounds were carried it is now possible, by means of such cars, storehouses and steamships, to transport tons. In providing due protection for game it will not do to overlook these improved appliances for its marketing. The refrigerator is aggressive; it refuses to be ignored. The ice-box has just come to the front in this State; and it will be well to understand exactly what it is and what it means.

Among the proposed amendments of the New York game law are clauses legalizing at all seasons of the year the sale of venison, quail, partridge and woodcock. The only proposed limitation upon this all-the-year-round market season is that the game shall have been killed and stored in the refrigerators of the dealers within the prescribed legal season for killing the game.

Such a provision, it is claimed by those engaged in the attempt to put it through, "would revolutionize the game law." We think that it would most decidedly.

The movement is instigated and controlled solely by the game dealers of this city and of the West. The circumstance of its being fathered by a game association should not be a blind as to its true nature. The proposed amendment is wholly and only in the interests of the pockets of the men who own large game refrigerators.

This proposed amendment is of the New York law alone, but it does not alone concern the citizens of this State; if passed, its evil effects would be felt equally in Michigan, Minnesota and the other game States of the West. The movement on the part of the dealers is a national one; it is then of national interest that it be defeated.

A market all the year around means killing all the year around, in season and out of season; and that means speedy game extermination. To guard against this illegal traffic it is proposed to provide a system of market inspection, affidavits by individual dealers as to the amount stored during the open season, and a record of each sale thereafter, etc. By such machinery it is claimed that any traffic in game killed out of season can be detected and effectively punished. We most decidedly doubt that any system could be devised and put into operation which would meet the requirements of the case. The continued and defiant violation of already existing game laws by certain dealers in this city, gives little promise that they are to be relied upon for a scrupulous observance of the refrigerator-affidavit system and the apathy of public feeling on the subject, as manifested by Gov. Cornell's failure to provide New York city with a game protector, gives still less assurance of the requisite vigilance on the part of officials.

But even if this control were provided, so that the sales out of season should be confined to game killed in season, the plan would still be utterly bad, for it is a premium on the unlimited killing of game during the open season, without regard to the current market demands. In short, it means the wholesale slaughter of game, unrestrained save by the limit of the strength of the butcher and the pocket of the dealer.

This brings us to the only argument advanced in favor of the law, namely, that the quantity of game killed in the present open season is largely in excess of what can be sold in that period. This is the root of the whole matter. The dealers have set to work to remove the restraint upon their trade. Instead of conforming to the law and being satisfied to confine their purchases to such amounts as can be disposed of within the proper season, they are now trying to regulate the season to their own interests by making the time conform to their purchases. The simple fact is that if the game dealers of this city can sell only a certain amount of game in the prescribed season, they have no business to buy more than that amount. They have it entirely within their control to regulate the supply. We fail also to recognize the pertinency of the argument that a vast capital is invested in the game business, and that those interested must secure a sufficient return therefor. If the capital is greater

than can be used to advantage when the trade is restricted to conformity with the existing law, let the surplus be withdrawn and be put somewhere else.

This home consumption of game is only one part of a traffic which is assuming tremendous proportions. The export trade to Europe is constantly increasing, and domestic dealers complain that they cannot sell here the game which comes from the West—it must go to Europe. The sufficient answer to that is that we cannot afford to supply the European markets with American game. The contract is entirely too large. The supply will not long be equal to the demand. Exportation of American game should be prohibited by national enactment.

In the absence of such legislation the only remedy lies in non-export laws passed by individual States. We call the attention of Western game societies to the importance of early movement in this matter. We understand that the subject is to come before the Michigan Association at their meeting. The time has come for decided action, and we hope to see the Michigan Association press such a law.

Respecting the proposed amendment to the New York law, we submit that game laws should be framed for the due protection of game, not to time-serve the interests of the market dealers.

We invite expressions of opinion on the subject.

NEXT FALL'S SHOOTING.

THE severe weather with which the present winter opened threatens the destruction of all our quail. From New York down through New Jersey, Pennsylvania, Delaware, Virginia and the Carolinas the same sad story comes to us that everywhere the quail are freezing and starving to death. Not quail alone suffer, but ruffed grouse as well, though these latter are better able to endure the snow and the cold than the quail. We have had snows upon snows until now the ground is covered to the depth of a foot or more. There are no bare places and literally no opportunity for the birds to feed upon the ground. In addition to this, the cold has been intense, and in many localities has for days ranged between zero and twenty degrees below. Cold is hard enough to bear when food is plenty, but the starving animal has no resources to draw on when the fatal chill makes itself felt, and soon succumbs.

Judging from our own observation, which is confirmed by the reports constantly reaching us from all quarters, the shooting next autumn will be very poor, worse probably than for a number of years. The efforts of sportsmen and farmers may do something toward keeping over a part of the birds, but even with the best-directed and most energetic efforts, there will not be enough quail saved to more than keep the stock alive.

We feel confident that the wisest step that could be taken would be to prohibit absolutely next year, and perhaps the year after, the shooting of quail and grouse. It would be some hardship, no doubt, to most of us to be obliged to refrain from the sport that we love so well, but it surely would be the wisest economy to forego this pleasure for a year or two if by that means we can render it reasonably certain that during the following years birds will be plenty. We are inclined to think that if the States of New York, Pennsylvania and New Jersey would pass such prohibitory laws, and see that they were enforced, the succeeding autumns would see such an abundance of game birds as have not been known within their boundaries for many years. It is a well-known fact that in many parts of these States ruffed grouse have been almost all killed off. It is said that in Sussex County, New Jersey, there are absolutely no grouse left; that they have been so closely followed up that one may now work most conscientiously through the best covers, where they formerly abounded, without finding a bird. Of course this has not happened all at once; for years the grouse have been annually growing fewer in numbers. Words of warning have often enough been spoken, but they have fallen on ears that refused to hear. The work of destruction has gone steadily on. Each fall the number of hunters has increased. Each year the number of birds left to propagate their kind has diminished. The grouse fly has done its part in the work of extermination. And now what was once one of the best counties for grouse in all New Jersey is, we are told, absolutely without birds.

It is an old story and a sad one. We have seen the same thing take place in so many localities that we feel that the prospect for this State is very discouraging. Prompt action is all that can save New Jersey, which, it must be said, has until recently furnished better shooting than any other place so near New York, from a terrible dearth of gallinaceous game.

We hope that the sportsmen of the Middle States will give this matter their serious consideration. Let them think the matter over carefully and weigh it well. We believe that a law prohibiting shooting for one or better two years would be followed by the best results. What do our readers think about it?

THE N. R. A. CRISIS.

THE Secretary's report to the life members of the National Rifle Association has its sting in the tail of it, where the retiring officer hits the keynote of the general feeling touching the old Board. It has been packed with officers of the National Guard, and yet a freak of a narrow-minded Commander-in-Chief decides practically that there shall be no more ball-practice by the National Guard. The amateur marksmen—those who shoot for the love of it, and who enjoy the keen excitement of a sharp competition, have been gradually frozen out of the Association. The Secretary himself has been about the only representative of this class, but he has had great odds to fight against, and it is but little wonder that he gives up his thankless task in despair.

Creedmoor is the house that is big enough for a day but too big for a year. It is a fine place for a prize meeting, but for the ordinary every day and weekly practice of hundreds of marksmen who would gladly patronize it, there are scores of objections to be urged against it. It might after all be a sort of god-send to the Association that the military incubus may be cast off.

The practice of the regiments should be kept up, and it is a matter for which the officers in charge will be held to an accountability by the public if they neglect it. But apart from this, and in no wise dependent upon it, is the body of shooters who shoot for the love of it. They can be self-sustaining, and the N. R. A. can better afford to dismiss from its attention everything connected with soldier work, and build up a great army of gentlemen shooters, cater to their demands, discover and meet their wishes, and keep ever in mind the "fostering of rifle practice," which is its published object in existing.

The annual meeting of the Association on Tuesday evening last, of which a very brief notice only is given in our rifle columns, was an important one, and in our next issue fuller details, with comments upon them, will be given. It was virtually a period of renaissance for the Association, and it will depend on very careful nursing for some time to come whether the infant can be brought back to life or no.

DOG MEN, BEWARE.—An individual signing himself J. C. Fowler, F. C. Fowler or F. A. Chester and dating his letters from Moodus, Conn., has by means of an advertisement in our columns made himself well known to a number of our readers. He has sold and traded an alleged setter dog called Turk, said to be by Elcho of Neil, to a number of people, none of whom have as yet received the animal. Any information in regard to this many-named individual and his present whereabouts will be gladly received at this office. The polynomial person having stated to all his correspondents that he was about to start at once for the South, it is conjectured that he may be now in Canada. We are of course sorry for the losses sustained by the individuals who have had dealings with this person, but they could scarcely expect anything better. If they were buying a horse, a house or a yacht, would they pay for it by mail or express without seeing it or knowing with whom they were dealing? We think not. People must buy their dogs as they would buy anything else, and if, as we have more than once said before, they do not exercise ordinary business care they must expect to be victimized.

THOUGHT AT TEN DOLLARS PER POUND.—To bring ten dollars a pound trout should be very fine, plump and finely davored, and yet some that recently cost Mr. Ellsworth D. Hayes that sum are not especially extolled for their table qualities. It happened in this way: Mr. Hayes loves trout and has been in the habit of fishing for them in Lake Placid, Essex County, N. Y., at all times in season and out, so dearly he loves them. Lake Placid is in the Adirondacks, in a locality which is not usually haunted by game protectors and notwithstanding that Mr. Hayes must have known of the new "protectors," as their appointment was published in the *FOREST AND STREAM*, yet such is his ardent appreciation of the delicate flavor of *Salmo fontinalis* that he thought he would risk it. Game protector John Liberty also likes trout, but only in season, and hearing that Lake Placid was placidly yielding up its trout out of season, wandered that way and found a box containing ten lake and three brook trout, and then sought the owner and invited him to an interview with his friend who was a Justice of the Peace. The Justice also loves trout, and as he was called upon to place an estimate on the worth of these, he fixed it at \$175, which Mr. Hayes added to the assets of the State of New York and departed to spend New Year's Day in the bosom of his family instead of the house kindly offered by the justice in case he declined to contribute the sum named to the State. We do not know whether Mr. Hayes

had the fish for his New Year's dinner or not, but hope that he liked the peculiar green back flavor, if he did.

WE HAD A PLEASANT CALL last week from Ned Buntline, whose sketches have so often graced the *FOREST AND STREAM*, as in years past those of Porter's *Spirit*. Our friend rightly claims to be one of the oldest of our sporting writers. In fact Ned Buntline was an expert shot, a crafty woodsman, and an enthusiastic angler so long ago, that man's memory runneth not to the contrary. Advancing years appear to have brought little diminution of the ardor with which he pursues his favorite sport, and in the mountain streams near his "Eagle's Nest" no one knows so well as he the pools where lurk the monarchs of the brook and the ripples where the leap of the trout flashes brightest.

THE BLOOMING GROVE PARK ASSOCIATION have been singularly unfortunate in the loss of their large and well appointed club-house in Pike County, Pa. The building was totally destroyed by fire Wednesday morning, January 5, the loss being between \$8,000 and \$10,000. The members of the association have shown much enterprise and pluck in their recent conduct of the affairs of the society, and will not be daunted, we presume, by this calamity.

NOT OUR AGENT.—We are informed that certain gentlemen in Buffalo, New York, have been victimized by an individual who has been collecting subscriptions to *FOREST AND STREAM*, and has failed to send the money to us.

Some of our readers appear to think that Mr. John Brewster is an agent for *FOREST AND STREAM*. We wish it distinctly understood that he has no credentials from this paper and has never sent a subscriber or a single dollar of money to this office.

IN ANOTHER COLUMN will be found a letter from Mr. P. McKoon. We may explain to our correspondent that we should not have taken the trouble of making a "public refusal" to publish his letter, had he been contented with the private one, and had he not first suggested making the matter public. That suggestion admitted no other course than the one reluctantly adopted. It gives us much pleasure to print the present letter, because we think that it is decidedly more creditable to Mr. McKoon than was the communication to which it refers.

THE PICTURE OF GLADSTONE which appeared in our issue of December 23 was produced from a pencil sketch (which, by the way, was the only one in the country) by the well known artist Mr. J. M. Tracy, of St. Louis. Gladstone had his sitting during the Vincennes trials in November, and never was he in better shape to be transferred to paper. Immediately upon Gladstone being awarded first at Robin's Island we telegraphed Mr. Tracy and secured the only correct picture of the dog ever made.

A HAPPY CONSUMPTION.—Mr. Alexander Moseley, the veteran retired editor of the *Richmond Whig*, congratulates the guild of anglers on the happy arrangement whereby the *FOREST AND STREAM* has the best fish editor in the United States, and whereby also that editor is where he can do the most good.

IT IS REPORTED that the recent storms have opened a new inlet into Shinnecock Bay. This, if true, is very good news, for although it is probably too late to save the fish it will no doubt have a beneficial effect on the spring shooting.

The Sportsman Tourist.

GULL ISLAND

THE ONLY VERITABLE ACCOUNT TO BE PUBLISHED OF THE TRIALS AND TRIBULATIONS OF THE JERSEY BOYS IN SOUTHERN WATERS.

"And Jonah went with them."

THE 4 P. M. train, Pennsylvania Railroad, found the second installment of the Gull Island Club en route for their possessions. The party consisted of F. M. Thomson, of 301 Broadway; F. Harrison and R. Hinrich, of Newark; Ezra Wright, from Utica, N. Y.—all sportsmen good and true—and your correspondent, each taking with him a trunk that caused serious and emphatic language by the baggage-men, and for which large extra freight was demanded. All this ammunition it was expected would result in a cur-laud at least of game. We had a rapid trip to Baltimore, where we were immediately transferred to the Bay Line of steamers to Norfolk. The steamer *Carolina* is a fine, large boat, with a table that is not to be excelled in any hotel in the land. Every delicacy of the season in ample quantities and put on in good style. Capt. Whittle is a thorough sailor and a courteous gentleman. In Clerk Wardrop we found a gentleman attentive to his duties and pleasant in his attentions.

We arrived at Norfolk during the forenoon, landing on the Portsmouth side, where we were met by that prince of porters, "George," of the Purcell House, to which place we had been recommended by the party preceding us. George is a jolly and very intelligent specimen of the Southern porter, knows his business and does it well. In Mr. R. T. James, proprietor of the Purcell House, we found a gentleman that knows how to keep a hotel, good table, good accommodations and attendance. We cheerfully recommend those journeying that way to give him a call.

We expected to take the steamer *Cygnat* on Monday morning for Van Slack's Landing, there to strike the steamer *Bonito* for Roanoke Island, where we were to take a sail-boat

for our island. But here we were told that the *Bonito* had stopped running and that there would be no conveyance we could get from Van Slack's further south. It would not do to be tied up there. What should we do? Here we made the acquaintance of W. A. Graves and A. W. Chapman, two congenial fellow-sportmen of the place, who suggested chartering a tug to take us to Roanoke Island. Mr. Graves immediately started in pursuit of a captain known to him, and the bargain was made for Monday morning. In the meantime that dismal rainy day in Norfolk that would have been so long and tedious but for the exertions of our new friends. They seemingly could not do enough for us. And we again were called upon to appreciate the large-heartedness of the Southern men. We had a right good time, and we shall never hold in affectionate remembrance the names of W. A. Graves, A. W. Chapman, George Walker, C. Owen and others of Norfolk city.

8:30 A. M. saw us bag and baggage on the tug Garden City, en route for southern quarters. We steamed out by the Navy Yard and through the canal to Currituck Sound, shooting now and then a dipper duck or gull by the way. Six o'clock P. M., and the wind blowing strong and cold from the north-west, we found us on the west side of Roanoke Island, instead of the east, where we ought to have been. We lay here at anchor all night, when the captain informed us that owing to adverse wind and low water it would be impossible for the tug to go further. We went ashore at a fish-house and, having had a palaver with somebody and fixed things, came back and the tug was soon alongside of the dock. Here we found that a native, for a consideration, would take us in his canoe around the north point of the island to Mantico. So we embarked, and about 2 P. M. reached that interesting locality, a village of some twenty scattered houses. We proceeded to the residence of Mr. George Bliven, having a letter of recommendation to him. We found him all we had been led to believe. Mr. B. is Register of the county, and although the section is largely opposed to him politically such confidence have the citizens in his character as a man and public officer that he has been elected and re-elected for a number of terms to the responsible office.

By him and his kind wife we were well cared for. In the morning we engaged of one John Thomas Daniels a schooner to take us farther on. Here, previous to starting, friend Wright purchased and put on board eight or ten empty barrels. Would have taken more could they have been obtained. These were to hold the vast numbers of geese, brant, and ducks that we were to find on and around our island.

Well, off we got at last, and had proceeded about six miles, or nearly to Hog Island Point, they said, when it was discovered that the wind was dead ahead, water very rough, and that it would be dangerous to cross Pimlico Sound under the circumstances. So back we went to dock at 10:30 and we all went sniping, there being good ground close at hand. Got quite a number, and your correspondent got a duck, nearly over his head in a ditch, ruining a new watch that he had purchased just before leaving home. Another night at friend Bliven's.

An hour after sunrise the next morning found us again at the schooner and off. At 1 o'clock we anchored off Chincocomoco, a cluster of low houses on the banks, and ten miles from the club-house. Here Captain Daniels informed us that he must have a pilot to take us farther. Sent his own officer and negotiator. Result—no water for schooner; must change to boat of lighter draft, etc. Engaged, we thought, said Daniels one Daly O'Neil and his canoe, another day. About this time we were getting used to such things, and we made the transfer weckly and in silence.

At 2:30 P. M. Thursday, the 9th, we arrived at the club-house.

Five days from Jersey City, lacking one hour and a half. We were welcomed in true club style by the boys there—Iral, Payne and Nash come in with us, and in their skills, while the flag was flung to the breeze at the gable, and Al. H.—frantically swung the dish cloth from the storm window, Captain Johnson rung the bell and made the opening speech as we struck the sands: "Great head of the church! where have you been all this time?"

We found everything lovely. A substantial club house 17 by 27 feet; commodious kitchen and dining-room together and gun-room on first floor. Stairs to second story, where the fifteen cots were systematically arranged in the men's chest or trunk at its foot. We gazed around, and the sixty or seventy brant hanging to the beams made us glad we had come.

Al, club life is jolly, with such caterers as Al. H.—, and such fun-loving and fun-provoking companions as Tom Hall and Nash. No blue hours when they are around.

But disappointments will intrude. We soon discovered that the birds were not so numerous or gettable as we had been led to hope.

On Gull Island Shoals (our island), where but a few days before were millions of brant and geese, now but a few stragglers were to be seen.

We were told by Mr. Mann, the mail man, whose route was along the banks twice a week, that ten miles or more above, and near the inlet, the birds were rafting in large quantities. It was accounted for on this theory: Brant like a brackish water only to feed in, and the high tide through the inlet and the long northern winds had so raised on the bars at Gull Island and so salted the water that the fowl had left for above the inlet and fresher feeding grounds. It was the first time in forty years, the natives said, that Gull Island Shoals were so free of fowl. You see Jonah was still with us.

After staying a few few days at the club-house with but mediocre luck your correspondent, with Nash, Thomson, Wright and Johnson, proceeded to Chincocomoco and the residence of Captain Benjamin Pugh. Hal, Payne and Heritage having left a few days before intending to stop a day or two at Nye's, where we learn they had a first-rate time with the canvas-backs, Harrison and Hinrich left us after a day's sniping at Chincocomoco. Captain Ben Pugh is the gentleman who built our club-house for us, and has charge of our possessions in Carolina. He is the most prominent citizen on the banks. Keeps the only store in the neighborhood, and has a very enviable reputation as a fearless and judicious coast-man, having saved the lives of seven persons at the imminent peril of his own. He also rendered efficient service during the last war as General Burnside's trusted guide.

Here our stay was pleasant indeed, but the confounded northwest wind kept us confined more than we wished. But with the services of our assistants, assistants in the person of the niggers, William and Daly O'Neil as boatmen and helpers, we had some good shooting. We found the bars and shoals above the inlet literally alive with brant and geese. Millions

and millions of these luscious birds were in the air scolding across from point to point or resting in long dark rafts of miles in extent. All these birds, we were told, or most of them at least, really belonged on Gull Island Shoals and that they would gradually gravitate back there when the high salt tide should run out. We were told that we had been exceptionally unfortunate in our trip this year, that such a state of affairs had not been in forty years, etc., etc. Jonah!

Well, we saw the fowl and knew they are in sufficient quantities to suit the most extravagant desires, and another year we propose to go down amply equipped and make it lively among them.

Jonah took us to this trip, as you will perceive, all the while. Owing to high winds, rain and rough water we only had one or two really good days for shooting. But amid all these clouds there were many sunny hours. In the captains and crews of Life-Saving Stations 18 and 20 we found big hearts and right royal fellows. Captain Bannister Midgett and Captain John Allen Midgett are good types of the brave and successful custodians of that dangerous locality. By them we were welcomed in generous style.

Did the reader ever shoot brant from a blind? Have out from fifty to one hundred decoys and, say, ten or twelve or more, if one has them, of live wild geese to do the honking? Did you ever? And as you lie snugly concealed, to see in the far distance those long living lines approaching, while your stools give out their honk of invitation, see the gradual lowering of the wings and dropping of the feet of these delicious birds, amid the incessant honking of the geese and the discordant note of the brant? When you can fairly see the white ring on the throat and just ere the great black feet touch the water you rise and pour in a broadside of No. 3, and as the vast number speed by you look over and see the white breasts of a goodly number within easy reach? Ah! that is sport, and when they come in pairs, by threes, by half-dozens, so thick and fast that your breech-loader gets too hot to hold in your ungloved hand, and you wade out in your high rubber boots and bring in all you can carry at one time of these queer waterfowl, weighing from six to eight pounds apiece! Canvas-backs are good and their shooting affords good sport, but they are not a priming to black brant shooting on Pinlico Sound. No, sir!

Well, all pleasures have an end; so, with our birds nicely packed in barrels, with our trunks, we started for home on Thursday the 23d, in Capt. Pugh's canoe, Daly O'Neill and Bannister Pugh as steersman and worker, N. E. Nash, E. Wright, F. M. Thomson and your humble servant—Captain Johnson only remaining until February, when another party proposes to go down. We reached Manteo toward night of the first day all right (guess Jonah had left us).

At the earnest solicitation of Mr. Lewis Mann, the mail carrier from Manteo to Kinnebeck, Mr. Nash and myself betook ourselves to his house, some two miles inland on the island. We found Mr. Mann very pleasantly situated, in Gen. Burnside's old headquarters, where he had charge of the island. Mr. Mann is one of the most intelligent and go-ahead of any of our party, and he is in our trip South. He knows everybody in the two counties and all know him and speak of him as the right man in the right place. The next day, Jonah still being around, it rained heavily all day and no wind, until about 3 p. m. it let up, and there being a slight wind, although in the wrong quarter, we decided to start for Powell's Point, about 30 miles, where we were told the steamer Harbinger would pass about 9 or 10 p. m. for Norfolk.

Well, we were off with all our stuff (four of us) in this open canoe, wind N. W. We wanted to go about north. We bowled along pleasantly for an hour or two, when the wind freshened up dead ahead. It was tack and tack; the sun went down; it grew colder and colder. With Croatan light over our left shoulder in the distance, we were told that when we could see a light ahead (the beacon on Powell's Point) we would be half way. Ye gods! how we watched for that light. Hour after hour passed by, higher grew the wind and colder the night air. We were chilled to the very bone; the gunwales of the boat at times running under water, the spray flying over us and freezing where it fell. Just before 9 o'clock the light appeared—only half way; we could not reach it in time for the Harbinger. Would we reach it at all alive? Put on more sail. For God's sake help us, we are freezing in that open boat far out in Currituck Sound.

It really seemed that Frank T. would die before we reached the wharf. Prone in the bottom of the boat he lay, groaning and crying in pain and agony. Poor slim, fragile Wright, wrapped in his rubber coat, but chilled through and through, suffered in silence.

Nash forgot his jollity in this hour of intensity. As for the undersigned, his lower extremities, from his hips down, were like clogs; they were past feeling. But he thought of home, of that cozy room with the fire burning bright, that tea kettle over the gas lamp and the sugar and the lemon—and if this was all a dream—or that—or was this the last. Should he struggle more?

All was still save the rushing of the waters by the gunwales; we were fast losing our consciousness, when we were aroused by the thumping of the boat on the wharf—half past eleven—Powell's Point Dock, a house on stilts a quarter of a mile from land.

But the man in the house refused to be aroused. Said he wouldn't get up—boat had been gone hours and he didn't take in travelers, etc.

However, after the matter was explained to him he aroused himself and proved indeed a good Samaritan. He had no wood, but he broke up boxes and made a fire, and we crawled on our hands and knees (not one of us could walk alone) up that pier and into that 6 by 8 room, where we shivered for two hours, while our host, Jehu Midgett, God bless his kind heart, waded ashore in his bare feet and made arrangement with Mr. Newbern, a planter on shore, for a warm breakfast for us. About 4 p. m. we got ashore and were kindly received by Mr. and Mrs. Newbern; but not one of us could eat, we drank a little coffee and fell asleep in our chairs in front of the fire. At 8 o'clock Mr. Midgett had four of Mr. Newbern's boys, each with a pony and cart, before the door to take us and our luggage across country, 14 miles, to Coin Jock, on the canal where we would strike a steamer for Norfolk, some time.

And this was Christmas, 1880, and across country in a cart to the music of the darkies' guns and horns. But it was not a bad ride by any means, and we arrived at Ith's hotel, Coin Jock, about 2 p. m. Here we found Christmas being celebrated in all its glory. Mr. Hall is a good host, keeps a first class hotel and one of the best tables we ever put our legs under. He is the proprietor of a large store. Has a good paying trade and seems to be doing well. He is a jolly good fellow, and our stay with him was made exceedingly pleasant.

We were aroused by six the next morning with the intelligence that the steamer Astoria was passing the bridge on route for Norfolk. Up we were and soon had all transferred.

Now we were all right, we were on the thoroughfare, and Jonah might be blown. We steamed away up the canal. Hurrah! we are homeward bound. But bark! that grating sound, that lurch and sudden stop. We were dead fast on a sunken log. (Jonah still with us.) An hour of backing, going ahead, poing, etc., and we were off.

We passed through the canal and into Currituck Sound. All was going on pleasantly; we thought, although the wind was very strong and dead ahead. About noon we came to anchor, the captain saying that he could make no headway against that wind. It was blowing the water out of the Sound so that it would be dangerous to proceed. (Jonah chuckling again.) So we lay at anchor all Sunday and Sunday night. Monday morning about eight, the wind having gone down, we up anchor and on our course again, and arrived at Norfolk in due time for the Baltimore boat. Captain Hudgens, of the steamer Astoria, is another type of those energetic Southern business men. Our two days and nights with him were very pleasant. He sets a good table and plenty of it, and the demands are reasonable. Well, we were at Norfolk. (Jonah.) But hold! the train was an hour and a half late; boat had to wait. Never mind. Arrived in Baltimore all right—but train behind land again—but off at last all right. Bothered some around Germantown Junction and West Philadelphia, but off for Jersey City. Jonah dead now and gone to rest. But hold! passed Newark, crossed the meadows, drew high to Bergen cut, dead stop; delay of an hour in sight of home.

Who was the Jonah?

But all is well that ends well. Such is a plain and unvarnished account of the trials and tribulations of one party of the Gull Island Club on their first trip to their new possessions. We had some hard times, but we are not by any means discouraged. Another year and we can reach Gull Island in one day and a half from Jersey City.

The railroad from Norfolk to Elizabeth City will be completed and running by the fifteenth of this month. Thereafter, steamer will be put on the route, contract with post office department made to carry the mail (and passengers) daily from Elizabeth City to Roanoke Island and farther south, thus passing by our possessions, and the best brant region on the coast if not in the United States will be within easy reach. Gull Island stock is still booming. JACOBSTAFF.

Natural History

OUR WATERFOWL.

Eristatura rubra. Ruddy Duck. Male, neck and upper parts brownish-red; under parts silky white, watered with gray; chin and sides of head white; crown and nape black. Female and young, mottled dusky, darkest on crown and back, paler on sides of head, chin and lower parts; under tail coverts always white. Plumage, silky. Length, about fifteen inches. Bill and feet dark.

Of the two species of the genus *Eristatura* found in North America, the present is the only one known to sportsmen. It is moderately abundant and generally distributed throughout the country, though we have never ourselves taken it on the Atlantic coast. Audubon speaks of its occurrence in Florida in goodly numbers, and says that he shot forty there in a morning. Dr. Coues reports it moderately abundant during the migrations throughout the Missouri River region, and states that he found it nesting near Turtle Mountains and along Milk River, a tributary of the Missouri.

The genus *Eristatura* may readily be distinguished from any of the sea ducks by the peculiar character of its tail feathers. These are from sixteen to twenty in number and are very narrow and stiff and appear disproportionately long because of the shortness of the upper tail coverts. The webs are often worn off the extremities of the tail feathers, so that the shafts project like the spines on the tail of a chimney swift. The bill is broad and much flattened and the nail overhanging. The bright plumage ascribed to the male in the description above given is very seldom seen, at least in the United States, and almost all the birds killed wear the sober livery of the female.

Eristatura dominica—St. Domingo duck. "Male, head anteriorly and chin black; hind head, neck and breast deep ferruginous; above, brownish-red, blotched with black; below, lighter ferruginous; speculum white. Female similar, but less strongly marked. Bill smaller and less expanded than in the preceding."—(Key to N. Am. Birds, p. 295.) Length, thirteen to fourteen inches.

The St. Domingo duck is a South American and West Indian species which has only been taken in the United States on two or three occasions, and is purely accidental here.

Merganser.

The *Merganser* constitute the third sub-family of small duck-like birds inhabiting North America. They are readily distinguished from any other ducks by the bill, which is almost cylindrical instead of being flattened. Its nail is hooked and overhanging, and the lamellae are produced, in several forms, into distinctly tooth-like processes directed backward. The birds of this group feed to a very great extent on small fish, which they are readily enabled to capture and hold by means of their greatly modified bills. They are thus fishing ducks and of course, gastronomically considered, not particularly excellent. There are only about eight species, of which North America has three, only one of which, however, is peculiar to the new world. It should be said, however, that Audubon stated that he took a specimen of the European snipe (*Mergellus albellus*) on Lake Barataria, near New Orleans, and Wilson speaks of it as abundant, but the latter probably confounded some other species with the one in question, and as no second specimen has ever been taken it

is conjectured that Audubon too may have been mistaken.

Mergus merganser. Goosander, Merganser. Fish duck. Male with head somewhat puffy; glossy green in color; upper parts black and white, the latter crossed by a black bar; lower neck, all round, white; under parts white, tinged with salmon color, which, in the dried skin, soon fades out, leaving the under parts plain white. Length, about two feet. Bill and feet red. In this species the nostrils are near the middle of the bill, and the feathers from the forehead project further forward on the bill than do those at the side. Female has head and neck reddish-brown; upper parts ash-gray where black in male; under parts white.

The Goosander is distributed throughout the whole of North America and is extremely abundant in winter on the Atlantic coast. When the weather is so severe as to have frozen up almost all the open water, these birds congregate in considerable numbers on the open spots on our rivers, where the swift flow of the water prevents the formation of ice, and in such places they are sometimes shot in great numbers. The flesh is very fishy, however, and the birds, as a rule, are not fit for food.

Mergus serrator—Sheldrake, Red-breasted Merganser. Male with a thin crest; head glossy green; upper neck white; upper parts somewhat as in *M. merganser*, but with less white; a small white patch in front of wing; forebreast reddish-brown, streaked with black; flanks waved with black; under parts white. Female colored much as in *M. merganser*. Smaller than the preceding. In the Red-breasted Merganser the nostrils are decidedly nearer the base of the bill than in the goosander and the feathers of the forehead do not reach further down the bill than those at the sides. The laminae of the bill in this species are tooth-like in shape and very sharp, but, as can be readily seen by removing the horny covering of the bill, the resemblance is merely a superficial one, and the so-called teeth are nothing more than unusually developed laminae.

The red-breasted merganser is almost everywhere a common bird. We have frequently found it breeding in the Rocky Mountains, and during the migrations it is found all over the United States. It is no better as a table bird than its larger cousin.

Mergus cucullatus—Hooded Merganser, Saw-billed Diver. Male with a very conspicuous semicircular crest: that of the female much smaller. Male black, including two crescent-shaped marks in front of wing and a bar across the speculum; lower parts, centre of crest, speculum and longitudinal stripes on tertiaries white; flanks reddish-brown, waved with black. Female has head and neck brownish-gray, chin and lower parts white; upper parts and flanks darker; less white on the wing than the male. Length of male, eighteen inches; female somewhat smaller. The Hooded Merganser has the bill shorter than the head, while in the two foregoing species it is longer. The nostrils are near the base of the bill and the frontal feathers reach beyond those on the sides.

In appearance the male hooded merganser is one of the most striking of our ducks. It is rather a solitary species, and we have never found more than two or three together. More often you may start a single bird, or perhaps a pair.

The Saw-billed Diver, as it is called in Connecticut, does not seem to frequent the salt water nearly as much as do the goosander and red-breasted merganser. We have found them most frequently on little pond holes far from the shore, or on the expansions of trout brooks that pass through the swamps. We have taken this species in Western Nebraska and on Heart River, in Dakota, but have never seen it in the Rocky Mountains.

The species mentioned in the preceding articles include all the *Anatide* known to inhabit this country. It is hoped that the descriptions may prove of practical value to gunners and may call their special attention to the different kinds of wild fowl inhabiting the sections where they shoot. Two interesting notes have already been called out by the articles, namely: the great abundance of *Harelda glacialis* on the Niagara River and the absence from the region about Winnipeg of Ross's Goose (*Anser Rossii*), which had by some writers been supposed to occur there during the migrations. We now know that it is the snow goose (*A. hyperboreus*), which is there called the "wavic."

PARTIAL LIST OF MINNESOTA BIRDS.—The eighth annual report of the Geological and Natural History Survey contains an interesting list of the birds of St. Louis and Lake counties, Minn. Mr. T. S. Roberts, the author of this list, is well known to our readers from his valuable contributions to the columns of FOREST AND STREAM, and the Geological Survey of Minnesota is to be congratulated on having secured the services of so energetic and competent an ornithologist. The region to which the observations made in the list relate consists of a strip of country along the shore of Lake Superior about one hundred and twelve miles in length. Devil's Track Lake was also visited. The country is everywhere thickly timbered, the continuity of the dense and sombre forest being broken only by occasional "burns," which admit the sunlight and afford the collector an opportunity to find some of those species which love the open country rather than the dark woods. An interesting account of the habits of the mourning warbler (*Geothlypis phainopepla*) appears in the present paper, extracted from a contribution by Mr. Roberts to the Linnaean Society of this city, read in February, 1879. There are also a number of valuable notes on other species.

The opinion of the Attorney-General in reference to the constitutionality of the Fishway law.

AUDITOR'S OFFICE, OTTUMWA, IOWA,
October 20, 1880.

HON. B. F. SHAW, Fish Commissioner of Iowa.
Dear Sir:—In the matter of constructing a fish ladder to the dam at this place, I wish to say to you that on the 7th day of August last past I issued a notice to the Ottumwa Water-Power Company, in accordance with the law, to construct a fish ladder to their dam and placed the same in the hands of Sam Chacey, sheriff of the county, for service. On the 9th day of the same month it was returned served. The said Water-Power Co. have employed counsel, and their attorney, Mr. Wm. McNatt, informs me verbally that they refuse to comply with the law and that the said fish law is unconstitutional. I am instructed by the President of our Board of Supervisors to ask you to procure the opinion of the Attorney-General of the State and transmit it to us in time for the November meeting of the Board, with any suggestions or instructions you may desire to give us in the premises.

Respectfully yours,

M. L. GODLEY, Auditor Wapello Co., Ia.

The above was submitted to the Attorney-General and the following is his opinion in reply thereto.

B. F. SHAW, Fish Com'r.
WASHINGTON, Iowa, Nov. 24, 1880.

HON. B. F. SHAW, Anamosa, Iowa.

Dear Sir:—In answer to your letter of the 12th inst., I will say that in my opinion Chapter 123 of acts of 17th General Assembly is not unconstitutional. A statute is never by the courts held to be in conflict with the Federal or State Constitution unless such conflict is clear and certain. One branch of the State Government, to wit, the General Assembly, has passed on its constitutionality by enacting it. The question is not a new one. While our courts have not passed on it, other courts of last resort have, and held similar statutes not liable to the objection of unconstitutionality. With these decisions you are familiar.

Yours very truly,

J. F. McJUNKIN, Atty.-Gen'l.

MR. BALLDOW: "The fishway law should be constitutional. I believe in protecting the rights of the people. The State constructs roadways, why not fishways?"

MR. SHAW: "I have here a printed protest against fishways by an Iowa miller and my own reply to it, which seems to cover the ground of the objection very thoroughly. I dislike to ask Mr. Mather to publish this in *Forest and Stream*, because he very kindly published it for me when it first appeared, and yet I would like to have it on record in our reports."

MR. MATHER: "The paper so fully states both sides of the case that it may be of interest to many, and the agreement to publish all the proceedings certainly would oblige me to print it even if it was of no interest." The protest is as follows:

Oxford Mills, September 20, 1880.

Editor Eureka:—You will oblige me if you will give me space in your valuable paper to express my views in relation to a law passed by the Eighteenth General Assembly of the State of Iowa.

Chapter 123, Section 3, of said law reads: "If, within sixty days after the service of a notice by the sheriff of the county, the owner, agent, or party in charge shall fail to consent to the construction of a fishway to be erected by the Fish Commissioner, then the county Board of Supervisors shall immediately proceed to construct and attach the same; and when so constructed, the original cost and twenty per cent. thereon, as a penalty, shall be entered upon the tax book of the county, and shall be a lien on said property, to be collected in the same manner as provided by law for the collection of other taxes."

Section 4 reads: "To carry out any of the provisions of this act, the county Board of Supervisors may issue county warrants for the payment of such expenses, and when the taxes are paid, the warrants and all accrued interest thereon shall be refunded to the county, and the balance, after paying the Clerk and the State Commissioner and Board of Supervisors for their services, etc., the proceeds to be paid over to the county treasurer, and will become a part of the school fund."

To this the Fish Commissioner adds, on his own responsibility, with a legal right, that belongs to his office, in his notice to mill owners: "No temporizing, or shilly-shally work will do, as it will be at the mill owner's expense, as the law requires him to keep it in constant repair."

Mr. Editor, I am a citizen of these United States and desirous of showing willing obedience to the laws thereof. I derived my title to my land from the United States Government, clear of any and all encumbrance, without any reservation of erecting or upholding fishways for the benefit of other parties. Therefore I am entitled to the same rights as the United States Government. Neither the State of Iowa nor any other State has any right to pass any law that will annoy, hamper, endanger, or depreciate the value of any man's property, without paying him in full for all damages he may sustain. If the people of the State of Iowa want to preserve the fish, what claims have they on the mill owners to compel them to be at all the expense? Does it benefit the miller more than the farmer, or any one else? Do they consider the fish as a public property? Do they want to fish and sell-eyed pike to the manufacturing interests of the State? If so, why don't they pass a law that will give them the power to destroy all the mill dams in the State, and give the fish a chance? They have just as much right to pass a law of this kind, as they have to pass the other.

What benefit does the miller derive from this heavy expenditure of money? You rarely find the miller with a fish-pole in his hand. It is not this class of men who reap the benefits of the fish law. For my part, I would give considerable money if there were not a fish in our rivers. They are the cause of bringing a parcel of lazy loafers to our fishing grounds, from the country and the towns, who destroy the surrounding property, tearing down fences and desecrating the Sabbath day, to the annoyance of quiet, peaceable and law-abiding citizens. Of course there are a few exceptions to this rule. It is for a class of men and boys like these who are required to be paid from \$300 to \$500 expense in erecting a fishway to protect the fish and contribute to their pleasure; not alone this expenditure, but they are required to keep this annoyance and encumbrance in perpetual repair, no matter whether it is carried out by any flow of ice and logs that passes over the dam—which will be the case nine times out of ten—or whether it carries out the dam as well.

Heretofore the mill owners of the State of Iowa have been well protected in their right, by the enactment of good, sound laws on water privileges, and by this reason Iowa stands second to no grain manufacturing State in our Union

—as the reports from the late Miller's Convention at Cincinnati will show. Is it possible that all the protection we have heretofore enjoyed is to be destroyed by some wild fish fanatic who cares more for a wall-eyed pike or sun-fish than he does for all the manufacturing interests of the State? Let the millers of the State rise in their might and defend themselves against such unjust and arbitrary laws, as they have done heretofore in such cases of imposition, and they will undoubtedly come out victorious.

If this fish law is enforced, then the next law I expect to see enacted will be one requiring every farmer who owns 160 acres of land on the line of any railroad throughout the State of Iowa to build a grade and lay a track the entire length of his farm at his own expense. Not only this, but the law will require him to keep it in constant repair, at the risk of losing the rest of his farm if he does not comply with all the requirements of the law, whether from unwillingness or inability. All these benefits he is expected to donate to the travel of the general public. Why not enact and enforce a law of this kind? One can be as easily enforced as another. I can see no difference.

If people of the State of Iowa want to stock their rivers with fish, why not levy a general State tax for the purpose of erecting these fishways and keeping them in repair, at the same time giving the mill owner a guarantee that any damage he may sustain from the erection of such fishway will be promptly paid by the State, or the county in which the mill dam is located. The State has no more claim on the mill owner in this respect than it has on the farmer, mechanic, or any other class of men. I think it is the duty of the press throughout the State to come out boldly and denounce all such unjust laws.

[Mr. Shaw's reply will appear in our next issue, and the other discussions and papers will follow as fast as we can publish them.]

Sea and River Fishing.

TROUT FISHING IN THE CANADIAN WILDS.

AT ten o'clock on a bright moonlit Saturday night, in the end of last month, a buckboard—bearing a flat boat filled with provisions, fishing tackle and a couple of fowling pieces with their concomitants, for the use and enjoyment of the young sportsmen, who after experiencing the many advantages of the different localities in the near and distant neighborhood of the city had carefully chosen their fishing ground—left the ancient city of Quebec by the Dorchester bridge, crossing the river St. Charles, where in the past century Jacques Cartier and his lady followers encountered, worn out by disease and harassed by the warlike redmen of the forest under their chief Stadacona, for the far off lake, Jacques Cartier, situated in the distant wilds of the Laurentian ranges, whither it needed the strong Canadian pony, whose sires had bounded over the fields of Normandy, to draw the heavy load over the almost impassable roads and steep mountain paths.

We had arranged that the work should be apportioned to the several members of the party according to their adaptability and expeditionary talent. Alfred DeChêne had to accept the outside work and Alexander Fraser and myself had to fulfill the inside work. The provisions consisted of ham, corned beef and a proportionate supply of drinkables.

We traveled under the bright moonlight through the villages of Charlesbourg, whose church spires tower so proudly from its mountain site; St. Pierre, the inmates of whose peaceful convent lay in unconscious slumber; Stoneham and Twesbury, peopled by the hardworking farmers from Ireland, and at daylight arrived at the post as it is called. This post, a species of log hut, is situated at the extreme end of the macadamized road which is about twenty-one miles from the city, and thence commences the government road, recently constructed, to Lake St. John, and which was some time since represented as the best of highways, but which our bushmen and farmers from Lake St. John have described as almost wholly impracticable, a fact which is also proved by the many amateur fishermen who have passed over that route.

The first camp on the government road is situated at the distance of five miles, where we breakfasted and fed our horse, also providing ourselves with fodder, which could not be procured elsewhere on our journey, or at the various camps, although wood and provisions were kept on hand for the use of travelers. Mr. Lachance kept this camp, and was most obliging in his endeavors to please us. We could not rest here for his food government. Here we found no game, but travelers passed his camp, excepting those who desired to fish in the higher waters around the Laurentides.

After resting at Lachance's post for a short time we left at about eight o'clock and in a couple of hours reached the River Cache, a beautiful stream, filled with trout, and whose banks are fringed with the fir, the spruce and the cedar tree. After mounting an extremely steep hill we, at half past eleven, arrived at the camp of Noel, which is without a guardian and is sixteen miles from the next settlement. Near this post are two lakes, one on each side of the road, both pretty large and abounding with trout; one called *lac a Noel* and the other *lac a Regis*. At this camp we rested ourselves and our Canadian pony, who appeared to be impossible of fatigue. While in the vicinity we saw twelve men fishing, who seemed to be having good sport, as they were continually making catches of fair sized trout. Of course it is admitted that the fishing in these lakes has been carried on for a long time, and that the waters are comparatively depleted. The same fact is the case with the two lakes which we reached a little further on—*Grand lac a Vepante* and *Petit lac a Vepante*. Both these lakes heretofore were famous for their trout, and unless the government interferes the water in the entire district must become entirely unproductive.

On the twenty-fifth mile we arrived at *lac Derroches*, where we remained for supper and a night's rest in the hut provided by the Quebec government. Here we found no game, but there was a certain supply of food, and had we had scythes we might have procured any amount of fodder for our horse, providentially otherwise provided. A stove, with any amount of firewood, was in the establishment, and we lost no time in making ourselves comfortable. One can hardly over-estimate, especially those accustomed to forest traveling and who have now and then been driven to extremities, the advantages to be found in these solitary camps, where the weary may find rest and the hungry food.

At five o'clock on Monday morning, after a good breakfast, we were ready for a start, and continued the route till about two in the afternoon we reached *lac a La Mare*, near which we reached the Montmorency River, along whose bank we drove for three miles and during this time took three days. The upper waters of the Jacques Cartier are not so wild and furious as when most frequently seen by tourists near its mouth, at what is called Natural Steps, although even there are fierce rapids and whirling pools from which three and four pounders in the way of trout are taken by hundreds. At a place called the "Meadows," sportsmen from the city are wont to spend the holidays and never return without a satisfactory basketful. From *lac a La Mare* we entered the bush, and on our route shot nine partridges before arriving at the camp, situated on the border of *lac a la Plue*, which we passed, not without a lingering look at its beautiful waters and dark nooks, suggestive of numberless catches. At midday we reached the Jacques Bridge, our final destination being thirty-nine miles from the first post and over sixty miles from Quebec. Here we stabled our brave little horse, who had so dauntlessly carried us over the difficulties of the road, and put up our tent, as in the camp we found four horses and the impediments of an abse party. Anxiously and quickly we disposed of ourselves to hurry our movements in order to commence fishing operations; one to attend to culinary arrangements and the others to manage the fishing-tackle and launch the flat; all which was rapidly executed. After dinner we paddled up the river for about two miles, and whipped down the stream with red and brown hackle, and before arriving at camp had taken over three hundred speckled beauties of a large size, frequently capturing two at a time. In the camp we found a party of eight, who had been fishing on the lake for a couple of days and had been very successful. In fact, *ce n'est pas dire* for this lake is at such a distance and the approaches so difficult, that few attempt the venture; but the happy few are always richly rewarded, and the only chagrin felt by them is the impossibility of transporting to the city their complete capture.

It is almost unnecessary to state that in the depths of the wilds, "the forest primeval," separated from civilization, we did not fail of making a jolly time of it with our new-found friends, and that with the fish, so loved by the ancients, and thus whittled from the limpid waters not to speak of partridge, of duck and corned beef, and the whole catalogue we contrived to make the hours of night pass quickly, and that when we sought our couches of branches plucked from the sweet-smelling pine and sapin, our senses soon found repose in what Shelley characterizes as "the other rosy as the morning" sleep.

On the following morning (Tuesday) we started for the rapids after breakfast, a breakfast partaken of as only woodmen can do on the wealth of the forest, strander and field; of, in fact, the results of forest and stream, rod and gun, and the rapids which intervene between the camp and Lake Jacques Cartier, at which water we arrived in about half an hour.

The lake is about fifteen miles in length and five in breadth, bounded on one side by high mountains, garnered by forest trees to the water's edge, and on the other side by woods, from which are wafted the delightful aroma of the cedar and pine. Near the shore, in a sort of open ground, filled with boulders, are created in ferns, twining plants and mosses, fostered by the moist earth which surrounds them. In the lake are two islands, delightfully situated at a short distance from the shore, and to one of these we paddled our boat after fishing, and revelled in a real *ad fresco* repast, which was in all respects truly bucolic: fresh trout from the surrounding waters, berries from the neighboring bushes and the vintage of Bacchus. In the afternoon the weather was unpropitious, and after trying our skill went down the lake and descended the rapids to the camp, which we reached at about eight o'clock in the evening, where we had a right royal Robin Hood supper of fish and game.

On the following day we again mounted the rapids, and at twelve o'clock encountered a violent snow-storm, which lasted for about an hour, and therefore returned to camp, where we found that the other party had left and had been replaced by another of three gentlemen from the city.

The distance we saw a bear satisfying himself with a leisurely meal of blueberries, and a dog of a safe distance from our fowling-pieces, but could easily have been brought to earth by a rifle. On sight of us he quietly retreated to his home in the woods. While smoking in front of our camp door an immense eagle performed several gyrations over our heads, and finally made a swoop upon the waters where were congregated large numbers of loon.

On Thursday morning we started for home, bearing with us as trophies of our booty over fifteen hundred speckled trout measuring from eight to fifteen inches in length, and also delicious memories of the sweet aroma of the woods and the tales which enhance the scenery of Lake Jacques Cartier. Quebec, September, 1880. F. B. ROBERTS.

RANGE OF BLACK BASS.

Bedford, O., Jan. 1.

WILL you please allow me a little space in your paper, in reply to Dr. E. Sterling's letter in the last number of *FOREST AND STREAM* in relation to taking black bass at the Sault de Ste. Marie? In his review of my communication of Nov. 15, I did not say, as Dr. Sterling states, that I had fished the waters of the Sault de Ste. Marie rapids and their "surroundings" for many years with Judge Potter, of Toledo, and had never caught any black bass there. But I did say we never caught any black bass at the Sault de Ste. Marie, and I repeat that we never did, nor did we ever hear of any being caught in those rapids.

In my communication I did not use the word "surroundings," but distinctly stated the Sault Ste. Marie, and referred to no other place.

One need not go twenty miles from the Sault to the Sailors' Encampment to catch black bass. This fish abounds in many of the lays and rivers of Lake Superior. They are found in the Ontonagon River, one of its branches being the outlet of Lake Agogebick, a distance of thirty miles south-west from the town of Ontonagon. That lake literally swarms with Striped Bass. A Black Portage mentioned by Dr. Sterling I have hauled in fish with a hand line and hook as well as I could cast my squid by hand. T. GARLICK.

TORPEDOES AND FISH.—A Newport correspondent tells of a torpedo station at that place which fires salutes, and asks about their effect upon the fish in the harbor. He says such a salute was fired on July 21 in honor of the French frigate *Magicienne*, when each torpedo sent huge columns of water into the air several hundred feet high. There can be no doubt about its effect upon the fish being instant death to

every one for a large distance around, as fish are very susceptible to shocks, which often burst the air bladder. We know that there are many fish killed by the necessary blasting operations for the improvement of our rivers and harbors, but we do not see the necessity of torpedo salutes.

Game Bag and Gun.

BUFFALO HUNTING.

BUFFALO hunting, or rather buffalo slaughter, is the most uninteresting pastime I know of. I cannot call it sport, as there can be no sport in any such a tame, one-sided affair, the result of which is settled nine times out of ten from the very start.

One frequently finds men, vain-glorious and conceited in their own prowess, who depict a buffalo hunt as one of the most glorious things out, besides dwelling in a sickening, grandiose strain upon the peril and tremendous risks they have run in killing these big-headed and bearded cows. A buffalo looks ferocious, but his appearance is so at variance and in direct opposition to his nature, that he always reminds one of the lion in which the braying of the donkey frightened away the lion.

A thousand buffalo can be stamped by a bunch of weeds drifting past them; then they will go right straight ahead, over and through anything, being far too bewildered to know or care for aught but escape—and the ground they cover, considering their weight and gait, is greatly to their credit, and shows that although deficient in pluck, hearing, eyesight and scent, they possess prodigious strength, backed by no end of wind, qualities which if combined with courage, would make them one of the most formidable animals of this continent.

I plead guilty to having killed a few buffalo, never for sport but the first time, as I was so disgusted with myself that I never had the heart to do it again; and I must confess that now although I ache to kill something "big," yet I would not go out to-morrow on a buffalo hunt any more than I would go to poison roost and slaughter pigeons by the sackful with a shotgun. Perhaps my early training on snipe and woodcock has rendered me unfit for this kind of murder.

There are two ways of killing buffalo; one is by stalking after once sighted, and the other is running them down on horseback. It amounts to the same thing in the end, so far as the buffalo is concerned, for these two reasons:

First—He cannot run away from a decent horse, and therefore is cornered and shot.

Second—He won't fight it out, can't climb a tree (Mark Twain to the contrary notwithstanding), burrow, fly away, or in any way dispose of himself. So he stands like a statue and is killed.

This is the fate that awaits him in any event; so I suppose he may as well be philosophical about it and die—not gauge—but sink on all fours and drop with a thud, the recollection of which even makes me feel ashamed of ever having killed one of these harmless, good-tempered, easy-going fellows—unless indeed it were for meat—the same principle that a farmer kills a pig, etc.

In stalking the hunter need only be careful as to the wind, as a buffalo does not trouble himself much in looking about for his enemies, so that when they appear it is too late to save himself. When once you see the game, proceed as in antelope shooting regarding your mount—only a little more so, for a moment's slight touch of a buffalo will strike mortal terror to a horse's heart, so that no ordinary lariat and picket-pin will hold him should one of these sheep in wolf's clothing happen to come near him. To avoid being left on foot, then, secure your horse with a strong rope and fasten him by the halter, as should he pull frantically, as he certainly will, if fastened to the bit, it will cut up his mouth, and he will generally break away by either pulling the bit out of his mouth or smashing his head-stall. To avoid all this, use a strong halter, long stout picket-pin, strong rope, say thirty feet long; unbridle the horse, when he will probably graze till you return, and in this manner occupy his time, which if he were left bridled would hang heavily on his hands, and becoming impatient would more readily perceive any buffalo that might chance to come in sight—and then good-bye to horse if not properly secured.

The stalking part requires no great amount of skill, and any man with ordinary common sense can approach on a favorable ground, to within seventy-five to one hundred yards, at which distance one shot behind the shoulder will settle the business—if not, be ready when he turns to find out "what's the row," and let him have it between the eyes; that will finish him if it strikes him fairly. Some men are so imbued with the "miraculous" that they will insist that a buffalo's head is impervious to a rifle-ball. That, of course, depends upon the rifle; all I can say is, that even with seventy grains of powder and 400 grains of powder you can approach on a favorable ground and hit squarely between and a little above the eyes, or just behind and a little under the ear, ranging forward. Either of these shots will penetrate the brain and cause instant death. I have seen several killed in this manner with a cal. .45 Colt's and Smith & Wesson's revolver, and also with Winchester rifles with only forty grains powder and 200 grains lead. So I must beg leave to disbelieve, *in toto*, the statements above referred to. As to the matted hair and dust which collects the forehead of an old bull, why that might to some extent stop a small bullet, but anything up to or over 270 grains lead and seventy grains powder will drop a buffalo stone dead if properly delivered, and a lighter load is not, in my opinion, worth speaking about.

In running buffalo much depends upon the horse—far more, in fact, than upon the rider—for as I have said before, however much nettle a horse may have, the sight of a buffalo is too much for him—at first, anyway. A first-year horse, when I have seen horses that at first went into what in men would be called convulsions, go and sniff around a dead buffalo with as much composure as they would about a hay-stack. Perhaps they felt cheap at having displayed so much cowardice and wanted to show off their newly-acquired courage.

When you see a herd get as near it as possible without being seen—this, on rolling prairie, is easy enough—keep the wind on your face, and when you have advanced to within a few rods of the herd, stop a moment, and then, when you feel that you can stop a small bullet, but anything up to or over 270 grains lead and seventy grains powder will drop a buffalo stone dead if properly delivered, and a lighter load is not, in my opinion, worth speaking about.

magazine always full, if possible, as it is easier to load as you go; besides, you may be dismounted at any moment, and then a few shots at your fingers' ends are handy. If you find your horse is giving out, why make one last spurt, and then your loaded tube is ready to do good execution. Don't wound a dozen, and find them all scattered over the prairie, tripping about in all directions. Kill them outright if possible, as your horse will be greatly well blown after his chase, and can't very well follow wounded game and then carry you to camp. So do your work in style; it is much more sportsmanlike, to say nothing of the suffering you can often so easily avoid.

If revolvers are used, change sides. The Smith & Wesson self-extractor, cal. .45, is the best, but a Colt peacekeeper, same calibre, shoots more powder, and will stand more hard knocks, and is much easier. Beware of the Smith & Wesson Schofield model, a better contrivance to tear your thumb and break your thumb nail could not easily be conceived. This action is simply bad, but the original Smith & Wesson American or Russian models are excellent, and unsurpassed for accuracy and rapidity of fire. It is always better to have two or even three pistols, and to keep one in the belt in reserve; then if you are thrown (pardon me, I am dismounted), or your horse falls with you, it may be convenient to have six shots all ready to check any undue familiarity an old wounded bull might wish to bestow on you, although the poor brutes are glad enough to be let alone as a general thing.

In connection with the chase, I will give a wrinkle that I learned in South America, the land of horsemen, and although not a preventive yet it is an admirable antidote. When on the full run it is sometimes ruinous to stop; in fact, in some cases, it is fatal, would be all. Still, if a man drops his pistol or anything of value he is in a quandary. If he stops he loses his game; if he goes on he risks with whatever fell, and the chances are as twenty to one that he never sees it again. However good a rider you may be, you can't stop to pick up your pistol, for the simple reason that you are past it before it reaches the ground. So just fling off your hat, or drop a good big handkerchief; either of these can be seen for a long way, and as your pistol is near your hand you can readily find it on your return—no need of luck. I sometimes have lost both, but that seldom occurs, unless in the evening, in which case it is better to dismount.

The buffalo's tongue is considered a titbit, and many a poor brute has lost his life to afford some Indian or "so-called" sportsman food for one meal. It is very amusing to see a novice carve it out. He prizes open the huge jaws, grabs the tongue with the left hand, pulls on it and slashes away, and is ready to find it off at the roots, divest it of the hide, and then you have a morsel fit for a king.

I must say that I know of no meat that surpasses that of a buffalo calf, especially when roasted in the hide, called in Spanish "*Corneo en cuero*," literally meat in the hide. For that matter any meat tastes better cooked that way, as much of the very essence is lost in skinning.

An old bull is tough and has a twang that I don't relish, but then it beats most other meats, and as to my palate is away ahead of beef, mutton, possum and all such oily stuff. This is merely a matter of taste, so as I don't eat oysters I suppose I am excluded from giving an opinion in the culinary art.

It takes a good swift horse to overhaul a calf when left to himself. When in the herd and on the run the cows always manage to get them in the middle for protection, just behind the bulls, when the cows bring up the rear, so that calves are well protected and comparatively seldom killed. This accounts for the large number of bulls that are killed, as the majority killed are bulls, old fellows that have seen better days, some gray with age and stiff in every joint. When breaking a horse from fear of buffalo be careful you don't lead him up to one that is bloody, as the odor of blood alone will terrify most horses; so for the first few times lead him up gently and not too close to a dead buffalo, one that has not been operated upon. An intelligent horse soon loses all fear when he finds that he has no harm to be done, and a little experience he will dash up alongside of a poor fugitive and afford you the most murderous shots; sometimes I have seen men place their carbine muzzle within two feet of the ear, and that, by the way, is a sure shot.

The only danger that I can see is in being pitched, and none but the surest-footed horse can follow buffalo long without coming to grief. What to you appears a perfect "cut-de-sec," is a mere plaything for a buffalo. He will dash down a wash-out with banks fifty feet high and steep as a steep. Then you think you have him sure; not a bit of it; he simply charges this bank, and by his immense strength of shoulder and muscles of iron he clambers up the other side, where no horse, however active, could live it through; away he goes, fresh as a lark, while you are doing your best to get out of a tight place. When they come this close on me, I simply dismount before going down, and as he does up the opposite bank I break his hind legs, then I pull, and that settles his trouble. If I have a rifle, then I go down as best I can and come out somewhere on the opposite side, but rarely in the buffalo's track, for although they are very appropriately termed the "surveyors of the prairie and bad lands," yet it is in their quiet moments that they display their ingenuity and prairie love for fading the most level road, and not when pursued and half scared to death.

A Texas steer or a South American bull has more "snarl" and is far more dangerous than a dozen buffalo, but they cannot compare with him in getting over rough ground and scaling impassable walls, possibly owing to their being too heavy and not so powerful in the chest and legs.

TRADER.

THE CATAWISSA CLUB—*Catawissa, Penn., Jan. 3.*—The annual election of officers of Catawissa Fish and Game Protection Club, held in parlor A, Susquehanna Hotel, Pottsville, resulted in the election of G. W. Reiferder, President; Abel Thomas, V. P.; William Eyer, Treasurer; H. B. Aldrich, Sec'y. The society has done some good work, and we hope to continue our influence in the protection of fish and game. We shall continue the practice of glass ball shooting. Should be pleased to meet any of our neighboring clubs who wish to shoot with us.

H. B. ALDRICH, Sec'y.

THE DEER LAW.

Editor Forest and Stream:

I have looked with considerable interest for the report of the last meeting of the Long Island Association's Game Committee, to see what recommendations they would make for perfecting the law relating to "protection of deer," and am very much surprised to learn, through your issue of 6th inst., that they recommend an open season of three months at a time of the year when deer can only be obtained through the agency of dogs, driving them to water, and then close by saying "hounding deer to be strictly prohibited."

I am not in favor of hounding deer, and wish means could be provided for keeping dogs out of the Adirondack region. But the inhabitants of that region are mostly those who kill deer in the fall for market, and must use dogs more or less. Later, when snow comes, they kill in still-hunting, and prefer that method, owing to the skill required and consequent greater pleasure, also the better condition of the venison when obtained. Not one hunter that I have ever known in driving a deer to water, then paddling up to it either to kill it with a club, or deliberately row all around it, and after getting the deer just where it is most convenient, shoot it through the head. No, they deprecate such actions. The sportsman (?) does a vast deal of it, though.

The guide is compelled to act in an entirely different capacity as guide from his natural manly feelings. He generally has a poor man's shirt every day, and is obliged to work for earning money. This is a necessity to attend spring fishing parties and fall deer driving parties. The sportsman whom he caters for in early summer must have venison, when there is very little skill required to kill deer, and I know a great many guides who will only allow the necessities to be met; but, unfortunately, there are others who stand on no ceremony, think it cunning to paddle a greenhorn up to a deer by just a short boat as a sport, and expect to meet the whims of their pay, being well aware that the numbers thereof know no difference between getting up to deer in May and June and the more difficult feat of supplying a camp with venison in August and September by the same method. The credit for skill as a paddler is what tickles the vanity of the average guide.

If we could have a law relating to the capture of deer that would put the sportsman and the probabilities are that the guides and hunters would be unable to pursue their vocations without stepping over the line. There is a vastness, to some, in the Adirondack region. The guides and hunters are rightly of the opinion that they should have a hearing, and laws be enacted that will greatly protect their interests. Laws enacted through the influence of people in remote regions without consulting them always will stir to rebellion the inhabitants of the Adirondacks, because it is so sure to be in some measure seemingly unjust to them.

If I am not greatly mistaken the present law in relation to hounding of deer was passed through the influence or petition of an association in close proximity to one of the best deer hunting regions of this State. What the effect has been in two years one would be astonished to learn. It has come to my knowledge that one party during the last autumn killed something like twenty deer before dogs, which means that the water was used to sink a greater portion of the venison in the lake, spoiled. I know of another party who came up from Maryland in July, eight strong, built a log house, had several guides and dogs, all ready for "music" when August 15th arrived, and "music" they had for about a month. A man who formerly was a guide and ought to know better, keeps a hotel on an adjoining lake to the one the Maryland party were encamped on. He keeps two dogs and a horse, and was obliged to say only in my saying "no" will drive all the deer away from this region, he said. "Well, the game is open and I intend to get my share. The law allows it, they say." There are so many like him who abuse their privileges that I should be pleased never to see another hound in the woods.

The early days of September bring many real sportsmen into the woods who kill no more than can be used, have their sport and go home. They are peaceable and disposed to be just and fair. Even they will infringe upon the law if it made to prevent the use of dogs entirely. So we get a great mixture—the guides, hunters, wantonly destructive sportsmen, the would-be inoffensive sportsman, and he who obeys strictly. How to meet the question has been the subject of study to a great many. As the law now stands we are subject to being overrun with sportsmen from other States and to having our deer rapidly disappear. While one set of men want certain laws another set oppose them. Should the proper law be passed for the protection of game and one giving some leniency to sportsmen the question would still remain, Who will see that it is properly enforced?

In my opinion the best way to have the deer law enforced is to enlist the guides and hunters in protecting the deer during the winter, spring and early summer, by granting them certain privileges that the summer and autumn visitors cannot get. The guide and hunter element could thus secure a few deer for the market. I do not consider it just to prevent the midsummer tourist from killing a deer to eat, for I feel confident that the fawn will live alone after July 15 or 20, and the deer begins to be quite wary at that time, but would deprecate killing deer before that time and the use of dogs before September 1, and then only for a few days or weeks.

It is the opinion of many hunters that the deer would increase if it were possible to prevent "floating" in May and June and early summer. Allow an open season from July 15 to January 1 and prohibit hounding.

There is a colony of Dutch or Germans on "the west side" who are as lawless as "all possessed." During the deep snow time they have been known to kill 300 deer while the poor animals were perfectly helpless, and to "float" all during May, June and July. Who can prevent it? There are deer in plenty now, but with the use of dogs we shall soon be compelled to prohibit the use of dogs for certain years, as they are doing in New England and in Pennsylvania. We have a law of moderation and one that will not cause rebellion in the Adirondack region.

The first year the present law went into effect to hound deer the association that petitioned for it was very strenuous and watchful during the close season and succeeded in obtaining information that a certain hotel-keeper in the woods had killed deer for his table. They involved him in a law-suit, which naturally increased to many whose interest it was to protect the deer. What was the result? His ideas are that the law shall not prevent his killing deer occasionally for his table and still allow the outsiders to come in at another time and kill as many deer as they please, before dogs and helplessly in the water, without a chance of escape. Naturally it is hard for such men to submit to the present arrangement. He is a determined man, an excellent still-hunter

the chase and love the music of the mellow-tongued sounds. Rabbit hunting is gaining in favor, and some fine dogs are owned here. Mr. Frank Laton has the staunchest; he took him on Christmas day to hunt rabbits in the big swamp. He started an old "long-leg" and drove him till the 25th without a stop, when the rabbit was shot, and made the dog a well-earned Christmas dinner.

THE PROPOSED NEW JERSEY LAW.

TOM'S RIVER, N. J., Jan. 9.

Editor Forest and Stream:

Having read in your issue of Dec. 30 a communication from J. H. B. relative to the growing scarcity of game in the State of New Jersey, and advocating a two or three years' prohibitory law on woodcock, quail, rabbits and pheasants, let me say in reply that I am a resident of New Jersey and think that I may be considered a sportsman, as I have been shooting over twenty-three years, both in the East and the Far West, and am pretty well acquainted with the nature and habits of game birds generally. All sportsmen know that it is not the gun used in an open season that exterminates game, but in the closing days, killing them in close season, and our severe winters when the ground is covered with snow, perhaps for several weeks, and the birds are starved and frozen out. There are plenty of men who call themselves sportsmen who will sit around their comfortable fires and talk of closing a game season for two or three years who would not walk one hundred yards in a snowstorm with a little feed for the birds if by so doing they could save a whole levy. Let such as these, and all others who really desire to preserve shooting, feed the birds, now that there is a foot or two of snow all over the State, and do as I am doing—set the farmers' boys to work trapping, buy the birds from them, keep them over winter and put them out in the spring. This plan, if followed by sportsmen, will be more effective in preserving game than a ten years' close season.

Those who are acquainted with the habits of quail know that when gurnal soue, the beaves broken up and a number of birds killed out of each, the remaining birds will mate and breed much better for it, or will lay their eggs in close season, and they will remain together. Few, if any of them, will pair off. Likely two or three hen quails will lay in the same nest, a constant warfare will be kept up, the nests destroyed, and no young birds when the season opens.

"J. H. B." also says that he finds that those who are best informed agree that the time has come when it is necessary that a close season should be established for at least two or three years. Now, sportsmen with whom I have talked relative to this matter agree with my views, that were it possible to get together enough non-sportsmen in our Legislature as would pass such a bill as "J. H. B." proposes, the result would be indiscriminate shooting at all times of year, and birds would get no protection. I am positive that sportsmen generally would neither recognize nor assist in the enforcement of such a law. The laws of this State are sufficiently stringent as they are. Our quail season opens November 1 and closes January 1, which makes a short one; besides there are no laws in the State which do not permit of shooting and the laws as they are cannot, or at least are not enforced. Then why talk of passing a law that would be universally disregarded? If the game laws of this State were strictly enforced we should always have good shooting.

As regards the growing scarcity of birds, let me here remark that we have had more quail this season in this vicinity than for a number of years past, and I think such has been the case throughout the State.

December 30, for up to that time we rarely have any snow. This would prevent pot-hunters who are in the habit of tramping quail in the snow till they come up to the bevy huddled together beneath a bush, where with one shot they will kill all. With the protection of game and the privileges of sportsmen like I, am, etc., H. C. G.

NEW YORK STATE ASSOCIATION.

THE Twenty-third Annual Convention of the New York State Association for the Protection of Fish and Game, and the appointment of a committee to receive donations of suitable prizes and to arrange for the publication and distribution of the advertisements and acknowledgments. The place selected is the Brighton Beach race-course at Coney Island. Clubs from all portions of the State, embracing the most influential residents of the various cities, as well as of the rural districts, will be in attendance. This section of the State, for the first time since the association became large; is chosen because of the incomparable advantages offered. It has been customary to offer prizes for competition at rifle, pistol and trap shooting, and for fly casting. These prizes, consisting of money, guns, fishing tackle, ammunition, and articles useful and necessary or ornamental, of every description, have always been donated by dealers and business men, who in return are advertised properly, and without expense to them, in circulars, programmes, pamphlets and the newspapers.

It is proposed to make this the most important and successful event of the kind. To this end the undersigned have been appointed a committee to receive donations of suitable prizes and to arrange for the publication and distribution of the advertisements and acknowledgments. The circulars and programmes will be issued between March 1 and March 15 next, and sent to every club of the association throughout this State, and to other State organizations and the press. They will also be widely distributed at the time of the convention and tournament, which will continue for at least one week, during the season at Coney Island, and systematic publication in the newspapers will be assured. All prizes must be delivered by March 1, 1881, and donors are requested to send a memorandum of the proposed gift at the earliest convenient date, as it is desirable they should before March.

All prizes will be exhibited, with the donor's name displayed thereon, for public inspection in a conspicuous place, for a reasonable time, and every practical effort made to thoroughly advertise the same.

Several valuable prizes have already been tendered and accepted.

All communications on the subject should be addressed to some one of the committee, who will cheerfully furnish the desired information. Respectfully,

Charles W. Wingert (Mountain Gun Club), 54 South Portland avenue, Brooklyn, N. Y., or care Nicol, Cowleshaw & Co., 743 Broadway, New York City.

A. Eddy (Long Island Shooting Club), 106 Sixth avenue, Brooklyn, N. Y.

F. C. Chamberlain (Nonpareil Sporting Club), 150 Sterling place, Brooklyn, N. Y., or care Lawrence, Taylor & Co.,

316 Broadway, New York City.

Chas. W. Rodman (Garden City Gun Club), 413 Eighth street, New York City.

Leslie W. Wilde (Washington Gun Club), 27 Fourth street, Brooklyn, E. D., N. Y.

We concur in the above: Abel Crook, President New York State Association; Geo. A. Chappell, President Long Island Sportsmen's Association; N. B. Cooke, Cor. New York State Association; Jno. B. Sage, Rec. Sec'y New York State Association.

DELAWARE BAY DUCK SHOOTING.

ONE mild, sunny afternoon this fall during a duck shooting trip, I lay off in a blind overlooking a bunch of decoys. Not a ripple disturbed the ominous quiet of the broad bay, or moved the dead grass and reeds around me: an oppressive hush pervaded the desolate marshes, broken only by an occasional screech of a passing sea gull.

I was thinking of "stilly nights" and home, when I awoke to remember I had built my cosy little nest almost over the "Waterman's Grave" (from whence the point derives its name) when I was rudely called to a chilly consciousness of a piercing northwester and a white-capped sea. The day had been a storm breeder indeed, and when I arrived alongside the yacht, long after sun set, wet and half frozen, all dreamy notions of poetic inspiration and creative imagery, fell limp and frost bitten before the stern reality of the situation. Next morning I took up my field glasses; ice and snow and a leaden sky met my eye, and I dive into the cabin to muse again.

Ben Davis Point, if we except Egg Island, is the most prominent in the Delaware Bay, the adjacent shallow cove, extending down to "Tuxet" Point, furnishing a large area of feeding grounds for waterfowl; and no better spot can be found in these waters for geese, brant and ducks, as they fly to and fro across the Point. A day or two of westerly winds bring them into the cove from all parts of the bay in countless numbers, and a good paddler with a first-class shooter about him can kill his boat in a few days. During heavy southeast gales the birds are driven inland by the rough water, and take shelter in the Back Creek, the Tweed and their numerous tributaries and fresh water streams. I have killed as high as thirty-nine black ducks singly with but forty-five minutes of daylight to do it in. True, it was during a blinding snow storm, and I had the first whack at them. The latter part of February and March is the best time for geese and brant. Blue bills are so numerous that they are abundant here, being caught in a snail gill and duck snail drift, other nets ranging from twenty up to one hundred and sixty in the treacherous meshes. An old fisherman tells me this with a long face. Every fall for twenty six years I have paid a visit to Ben Davis Point and the Waterman's Grave. An oil painting, done by young Peel just before he died from a sketch taken on the spot, and presented me, now hangs in my bed room, and it is truly a very lifelike picture of a very desolate spot. R. G. W.

Form yourself into a committee of one and feed the starving birds, or pay some one of your friends in the country to do it for you.

A KANSAS INCIDENT.—Abilene, Dec. 28.—I notice quite a number of deer brought to town—seven or eight—one turned the scales at 190 lbs.—a fine buck.

Quail are very plenty here this fall and we are having fine sport with them. It is no unusual thing to find eight to ten large coveys in an afternoon hunt, and sometimes something else, as one of our boys can testify to. He was out with a tripe lately for a quail hunt, one of our small streams, and they had been quite successful, one hunting on one side of the stream and one on the other, only one dog, and he like a policeman, never around when wanted. C. noticed a likely looking head in the creek, tramped down into it the long grass and bushes, when suddenly, with a snort and grunt that made him quake, he found himself attacked by a beast that savagely snapped at his legs. No trees handy, afraid to turn and run for fear he should take a piece out of his back. With hair standing on end, he stood his ground like some Roman gladiator, and poked and punctured at her with what? With his gun, and was about to give up in despair, when he remembered it was a gun, and pulled both triggers. The charge of No. 8, backed by a good charge of powder, did the work. Just then B., a farmer, and the dog came, and they gazed upon the monster; the silence was broken by the farmer, who remarked thusly: "Yes; she was a fine one, and pure Berkshire, sold \$50 worth of pigs from her last year; would not have parted with her for any money, besides the pigs will be sure to die—but, boys, its yours, give me \$16 and we'll call it square." Dingo.

NEBRASKA NOTES.—North Platte, Neb., Dec. 21.—The boys are having lots of sport now. R. Watts came in from the Dismal. Killed twenty deer, and they were first-class. As I had a saddle mule I know. Game is very plenty this year; and it is a good thing for some of the farmers over on the Republican River who did not raise any crops this year. Any day you can see loads of game in our city going south. Mountain lions are plenty this year. A large one was killed Monday at McPherson. One of my acquaintances saw four on the Medicine River shot at them, but did not kill any. Dillon and R. Watts start to-night on a grant hunt up the North Platte, near Offallins Bluffs. There is a band of antelope there, driven down by the storm, and as they are first-class shots they will make it a successful trip. The antelope is hard game to get. I have hunted them from Old McPherson to the Big Horn Mountains, and I find that if you get them you have to shoot from 100 to 200 yards of them, and there are more killed inside of 150 than over. But a .45 cal., with 100 grains of powder, will most always do the work if any rifle will. But I think that a good repeating arm that would use 100 grains of powder would be the best, and I don't see why some gunmaker don't get one up, as it would pay. Men won't use a .56 cal. rifle out here. The bullet don't go as fast as they wish. If they would make a 12th rifle, .45 cal., 100 grains, they would have the best rifle for deer and antelope. P. H. M.

GAME AND GUNS AT OMAHA.—Southwestern Minnesota and Northwestern Iowa is a country but sparsely inhabited as yet, and embraces without doubt the best chicken shooting to be found. Chickens are found by the thousands and the numerous lakes afford, in season, splendid duck and goose shooting. The lakes abound in multitudes of fine fish, and all in all, for sport in the fall months, this region cannot be

surpassed. There is no use in naming particular localities, as the sportsman cannot go amiss. The sportsman should be prepared to camp out, and not depend on finding much, if any, accommodation at the best places. The present cold weather has driven the deer down from more northern regions, and fine sport is now had within a few miles of Omaha. Seventeen deer shot in one week on the Minnesota bottom within six to ten miles of this place. In shot-guns almost every body uses heavy ten-gauge guns, with pistol grips—and almost everybody overloads their guns, the rule being to put in all the powder and shot the shoulder will bear. Of dogs, we have curs of high and low degree in innumerable numbers and a fair sprinkling of really good dogs. NAUTICS.

A HINT TO GUNMAKERS.—Fernandina, Fla., Dec. 28.—In your issue of the 21st inst. we read with much interest two articles by "Bedford" and "Dell," under the head of "Gun, Powder and Shot." They contain, without doubt, much practical information, and if every man who is an amateur sportsman had the time to thoroughly test his fowling-piece, as prescribed by these gentlemen, he very probably would be much more successful in the field. But just here is the trouble. Such experiments must not be conducted carelessly or hurriedly, but with such great precision and accurate registry of results as would consume much more time than many of us could command. Again, such trial would necessitate a convenient range for target practice, that to many would be inaccessible, except at remote distances. In view of these hindrances to the many who might otherwise make these tests for themselves, we would suggest, with due deference to the manufacturers of guns, or at all events of the better grades of guns, that they would specially test each gun for the specific purpose of furnishing with each gun directions how to load said gun so as to attain the best results, viz.: number of drachms of powder to each number of shot; how to load on both powder and shot; what make of powder was used in the tests as to mills and number, and the range of the piece according to the loading. We are sure that there are but few purchasers who would not be willing to give an extra price for a gun accompanied with this accurate information. There is no doubt that many an excellent gun is condemned and probably many a man branded as a "muff," who might otherwise be a very fair shot, on account of the want of this accuracy of knowledge of just how to load. We do not know that our suggestion is new, but we have never heard it advanced before, neither have we ever seen any directions of any kind accompany the sale of a gun, we therefore presume it is unusual, and consequently our idea is original. We write this communication to you, knowing that it is ever your pleasure to give every assistance and encouragement to the lovers of the sports of the field, and that you invite the views of all that may tend in any way to assist to give to the greatest number of sportsmen the best results and greatest success in the prosecution of their sport. AMATEUR.

THE PROPOSED REVISION.—New York, Jan. 7.—Editor Forest and Stream: My attention has been called to the proposed measures for the protection of game as proposed by the Long Island Game Association. A number of sportsmen have called on me and asked me to use what influence I have toward expiring and preventing the passage of any such act as they contemplate bringing up at Albany. The meeting held seems to have been entirely under the control of the dealers in game and fish, and the proposed change is simply to allow them to close the season, thus opening a market for poachers and encouraging them to break the laws. The bad features of such an act have been so thoroughly exposed that it is not necessary to discuss them now. It would prevent all further prosecutions in the large cities and destroy the usefulness of game protective societies. The only reason they offer for this change is that the present law interferes with their profits, which they could make were they allowed to pander to the appetites of the wealthy. I am sure, however, that with the growing feeling for the necessity of game protection such an outrageous law will not be passed. When will clubs and individuals stop tinkering with the game laws and learn that it is far better to see that their country friends keep their quail from starving this hard weather and enforce the present laws than to spend their time in urging the passage of new ones. People in the country get confused by the constant changes; they do not have time to get fully acquainted with the laws before they are altered. A few birds kept over and turned out in the spring and a few quarts of small grain scattered in the swamps will do more toward providing good shooting than all the game laws in existence. W. HOLBERTON.

FLORIDA.—Madison, Dec. 30.—I came to Florida about a month ago in search of good shooting grounds. Thus far I have confined my attention to ducks and quail, which can be found in great numbers at almost any point between Live Oak and Tallahassee. I came here a stranger, but found hospitable gentlemen both ready and willing to direct me to the haunts of the duck and quail, and in many instances accompanied me into the field with their guns. From fifty to seventy quail is the ordinary bag of two sportsmen going out for one day and shooting from 9 A. M. to 4 P. M. The cover is good open brown sedge and the birds lie well to the dogs. Trust that you will direct inquiring quailers to this the finest game country I have ever seen. At Tallahassee Judge Westcott is the most enthusiastic sportsman in that section of country. G. E. P. H.

AMONG THE INDIANS.—Lower Brule Agency, D. T., Dec. 16.—This is quite a sporting country. We have the turkey and deer quite plenty here, and also chickens, though from some reason this year we have none to speak of. The general opinion of the employees and officers at Fort Hale (which is situated about thirteen miles from here) is that the young broods were killed by a freshet of the Missouri River, just as the young broods were hatched out. As a general thing they are without number. One of our half-breeds has a fine star gourd, and every morning he makes a capture of a wolf by running him down. I learn that the buffalo are within a hundred miles of us, and a party start out soon for a hunt. I do not expect to get much hunting till the spring, when the fowls fly here quite plenty. LOWER BRULE.

INDIANA, Brownburg, Jefferson Co., Dec. 29.—A party of five from our town enjoyed four weeks' shooting last month along the Mississippi River, between Cairo, Ill., and New Madrid, Mo. We got eight deer, sixty-three turkeys, eighteen geese and a few ducks. As some of your correspondents seem to be interested in the weight of game birds, I

sent the record to Mr. Moore, and having made it up in a hurry I made an error in copying. Please correct in an early number. I have written Dr. Jarvis concerning this correction.

Very respectfully,
JOHN FOTTLER, JR.,
Pres't Mass. Kennel Club.

BEUF-TEA FOR DOGS—Philadelphia.—In issue of *FOREST AND STREAM* of December 29, Sterling, of Cleveland, gives an admirable receipt for making beuf-tea, and agrees with your correspondent that Liebig's extract, in the feeding of puppies, will cause death sooner than starvation, and in the course of the article mentions Johnston's fluid beuf as being a preparation which contains the entire nutritive constituents of the beuf, but states that it is too expensive a food for dogs. My experience with the preparation he refers to (Johnston's) has been extensive, and I find it cheaper than any beuf-tea prepared by the house process and likewise more economical than nutritious extract of the soluble properties of Johnston's fluid beuf, costing \$16 per dozen, or \$1.33 per pound, there are sixty-four spoonfuls, which would make a single spoonful cost about two cents, and as it takes but two of these to a pint of boiling water, the pint of beuf-tea would be but a little over six cents. This, compared with butcher's beuf at eleven cents per pound, is certainly cheaper, as the rule (for making beuf-tea, even by the process he gives) is "a pound of beuf to a pint of water." I learn that Mr. Johnston first makes an extract of the soluble properties of the beuf (which is more stimulating), then beuf is dried and impulsively powdered and added to the extract, the combination making a food as nutritious as the solid beuf itself. The powdered portion being microscopically fine, is readily assimilated by the weakest stomach and contains the fibrin as well as the albumen. I grant that any beuf-tea, however made, is rather expensive food for dogs, but who would not go to the expense in the care of a valuable blue-blooded puppy, weak and run down from effects of distemper? *Homo.*

ALEXANDRA PALACE SHOW.—At this show (which is to open on Tuesday, Jan. 18, London, England) the following gentlemen are announced to judge, viz.: For bloodhounds, mastiffs, St. Bernards, boarhounds, Rev. W. J. Mellor; Newfoundland, Dalmatians, smooth-haired terriers, Yorkshire terriers, Italian greyhounds, toy terriers, Mr. Howard Maplecock; deerhounds, Pomeranians, pugs, sporting and non-sporting puppies, Rev. G. H. Kingston; greyhounds, English setters, Gordon setters, Irish setters, Bedlington and black and tan terriers, Mr. S. Lang; pointers, Mr. J. H. Whitehouse; retrievers, wire-haired fox-terriers, collies, bull terriers, Irish terriers, Mr. S. E. Shirley; spaniels, Major Wille t and Rev. A. H. Willett; smooth-haired fox-terriers (and puppies), Mr. F. Burbridge; dachshunds, bassets, Rev. G. F. Lovell; poodles, Capt. the Hon. F. Greville; bulldogs, Maltese, Blenheim and toy spaniels, Mr. J. W. Berrie; skye terriers, hard-haired Scotch terriers, Capt. R. Hutton; and Dan. die Deumont terriers, Rev. W. Eddeman. The show will last four days and the schedule is, as usual, liberal.—*London Field.*

GLADSTONE—JOE, JR.—Columbia, Tenn., December 31.—*Editor Forest and Stream:* In your issue of the 23rd instant, giving the pedigree and performances of Mr. Bryson's dog Gladstone, you state that "in the race against Joe, Jr., at Florence, Ala., December, 1879, his speed and bottom were so apparent the judge for Joe, Jr., stated after the race that Gladstone was a third faster than Joe, Jr." Being the gentleman in question, I rise to a privilege. I made no such statement, but, after a conversation between Mr. Bryson and myself, on the afternoon of Tue-day (and after the race had closed by Joe, Jr., winning upon three legs), in which Mr. Bryson said that "he thought Gladstone a third faster dog of the two, and at two o'clock that afternoon he told Mr. Campbell that he had his dog Joe, Jr., beaten." I replied that during the greater part of the first day Gladstone did show more speed (without mentioning the ratio of speed of the dogs), but as the close of the first day the third race was run, and in my opinion much the better dog, and at day 4, Joe, Jr. was defeated in the race instead of the "victor," as he thought. The above is a true statement of the facts, and everything that passed between Mr. Bryson and myself or any one else relating to the race after its close.

Query: If the speed and bottom of the "peerless Gladstone" (as Mr. Bryson thinks him) were so apparent and so much greater than Joe, Jr., why was it that the score of the "braken-down" used-up, played out" Joe, Jr., going from eleven o'clock in the morning (at about which hour he reached one of his hind legs) until the close of the race, five o'clock in the afternoon of the second day, upon three legs only, was one point greater over the great Gladstone than that of the first day, and the score stood: Joe, Jr., first day, thirty-four points, Gladstone thirty points; Joe, Jr., second day, twenty-seven points, Gladstone twenty-two points.

Will Mr. Bryson explain? My great aversion to "news-paper notoriety" has been the cause of my long silence, I justify to the Kennel of Capt. Geo. W. Campbell demands, I think, a notice from me of your article. My parting injunction to Mr. Bryson is, "*Præst justitia ratiorem.*"

J. MINKIE WILLIAMS.

THE EASTERN FIELD TRIALS CLUB met at the Astor House, Tuesday afternoon and without having transacted any business adjourned to Thursday (this) evening.

THE MANCHESTER DOG SHOW.

(From the London Field.)

THE first exhibition of the Northern Counties' Canine Society began in the Volunteer Drill Hall, Stratford-road, Manchester, on Thursday, January 10, and will end this evening. The hall is eminently suited for a dog show, but the ring was woefully deficient. They were in the open air, covered over with canvas, and the day being gloomy, the light was very bad, and the judging accordingly suffered. The judges were: For fox terriers, Mr. T. H. Scott; mastiffs, St. Bernards, Newfoundlands, bloodhounds, deerhounds, greyhounds, dachshunds, skyes, bulldogs, dandie dinnouts and sheepdogs, the Rev. G. F. Hodson; pointers, spaniels, setters and retrievers, Mr. Ed. Armstrong; and black and tan terriers, smooth terriers, Yorkshire terriers, bull terriers, Irish terriers, Bedlington, pugs and toys (rough and smooth), Mr. Peter Eden.

The judging was started simultaneously in various rings, but Mr. Scott, after vainly trying to settle one of his classes of fox terriers, was so crowded in his cramped ring that he

gave it up for the time being, and sent the dogs back to their benches, deciding upon waiting until Messrs. Lort and Ed. Armstrong and the Rev. Mr. Hodson had done respectively with their classes. The attendance, at one time, was very fair on Thursday, and we sincerely trust that the public will patronize the show heartily, as it deserves every success. Messrs. Spratt had the feeding, so that was well seen to, and the dogs were comfortably benched and partitioned off, and they were attended to, in every way, in the style of our very best shows. The management itself left nothing to desire, and we must compliment the secretary and his working committee on their energy and business-like arrangements. In the champion class, Mr. Lort was entered, and in the open dog class, the brindle, Vulcan II., was rightly put first by Mr. Hodson, and Scafold King took second. The highly commended Colonel II. is of a poor, indifferent color; Carlo, commended, is rather banty; and Leo, passed over, is too leggy and small-headed. In bitches, Duchess of Connaught, shown in capital form, had no difficulty in taking first over Venus, who was a stunner. Mr. Jaffray's Nell looked very well, but was out-classed, and Nancy is simply a weed. The grey class was better than expected. First went to Doardard, a very grand puppy indeed, with an excellent bone and capital bone, but just a trifle bent in the forelegs. As he is, however, only eight months old, this doubtless will improve with age, and, on the whole, we think him a most promising youngster. Countess was rightly beaten by him. The next best was undoubtedly Mr. Kenyon's Rosendale, who has a deal of bone, and Mr. Jones' Tyler is a good puppy. The same gentlemen, Juniper, shows a lot of feather behind. Mr. Moore's Gauge is a smallish brindle, but nevertheless cheap at the catalogue price, £5.

There were three St. B-nard champions, viz., Barry, The Shah and Bayard. Bayard was looking certainly in the best form we have ever seen him; but his loins might always to place him behind either Barry or The Shah, especially when these two look well. In the open dog class Olympus, placed first, had the best bone, but is of a bad color, has a poor head, and is a little out of the line. Kile, who took second, is of a good color, but is too long-faced. Pilgrim is a well-headed dog, with a nice coat, but a bit straight in the stifle. He, nevertheless, should have been in the prize list, as he is a good one, but he was passed over. Caesar, who took third, is a most promising dog, his only defect being that he is not square enough in the muzzle. Mr. Macdonald's Banco deserved a card; but Thor, very highly commended, is bad in the face. Hob, who took a prize at Birmingham, was passed over altogether—a most extraordinary occurrence, especially considering that his kennel companion, Heffed, who is not nearly so good as he, was very highly commended. Haco is too long-headed; Osman I., highly commended, is not a bad dog, but has no dew claws; Meus, very highly commended, wants baze; Don is too small; and Snowdrit was not in form. In bitches Beatrice had no difficulty in winning over Morrisbrook Norma. Altona, highly commended, is of a bad color, and had a bad head; and Abbie, placed third, is placed in the jaw. Newfoundlands had six entries, but only one turned up, and that one was only very indifferent, so that all prizes were withheld; but in the bloodhound class Mr. Tinker's champion Dido, who was the only entry, looked in splendid form, and took the prize on her own merit.

Deerhounds and greyhounds were capitally placed, Mr. Sharpe's Self Defence and his Hairspring winning in their respective classes, although the competition was rather close. Ponto was the only champion pointer dog shown. In bitches his kennel companion Pan took the prize; she looked in very excellent form. The open large dog class proved another win for Bang II., beating Karac, who carries his years wonderfully well. The class was very good, and we think, well handled. Large bitches Mr. Lort also placed well, although Young Ruby, who took second, would not show herself at all in the ring, in spite of all George Hellewell's coaxing. Meg had a fair win. We liked very much Judge and Mite two of the proper sort, but they show age and the other one is a bit trifle. In the small dog class the awards were rightly given; but in bitches we could not at all agree with Mr. Lort's lat going in favor of Miss Bryson, as she is a weedy, small bitch with a bad head, and a complete absence of bone. This award created no small sensation. The bitch was certainly shown in good style; but, in the face of her patent defects, she did not deserve even a commendation, and Locket, Bona-Belle, or Bess were a long way her superiors.

The champion class for English setter dogs only had a brace in it, viz., Old Rock and Emperor Fred, and it took Edward Armstrong nearly an hour before he could decide between them. Over and over again he examined them; but still he halted at his decision. In the end, however, he gave the cup to Emperor Fred. Rock has been a great winner, as every one knows, and although he was shown in the pink of condition, he is getting stale, and doubtless this decision will be indorsed by other judges. Emperor Fred is truly a very fine setter. His head is simply beautiful, his neck is finely sprung, and his shoulders are all that one could wish for. He is, however, a trifle out at elbow, his feet might be better, and he is also rather hare-footed, but his feet are well covered with feather, and the celebrated trainer who judged on this occasion says that some of the best and fastest setters he ever knew had had this peculiar formation of foot. The champion class for Irish setter dogs only had a brace of very excellent ones, and first went to Mr. Bowers' liver and white Muid of Honor; but here we could not indorse the decision, as Ruth looked very well indeed.

The open class for dogs brought together a mixed lot, and, barring the first, second and third, nothing very remarkable appeared in it. The winner is a very grand-bodied puppy indeed, barring his head, which wants improving. Ranger, the celebrated Field Trial dog, was passed over, although he was well shown. The open class for setter bitches was far superior to the dogs. Mr. Statter scored first with one of the nicest bitches we have seen for many a day. Bessie IV. and Moll IV. should have certainly been very highly commended, but they were overlooked.

In the black-and-tan class Bate had a clear win over Ranger; his lat coat shone like satin, and he was shown in the pink of condition. Three fairly good-looking black-and-tan bitches competed, and no one can quarrel with the award. For Manchester the Irish setter class may be called a fairly good one, although we do not think it would cut a very handsome figure in Dublin. Viscount Palmerston had some trouble in getting placed over Dunkette, who showed a rare lot of quality; but Paddy, highly commended, is too thin, leggy, and poor-headed altogether. The Irish setter bitches formed a better class, and the two winners are very smart specimens.

The class for setter puppies under twelve months old was one of the finest in the show, and we are sure the four selected by Ed. Ed. Armstrong will be heard of again. First place to Nancy, a very strong puppy indeed, and we feared that Rose, Frank, of the Border, or Jovial, for next place, but Ruby took second. She is also very promising; and Dora, passed over, we thought deserved a notice.

The curly-coated retriever dogs were an average lot, first going to Merry, a well-known handsome liver-colored dog, and a winner at many other shows. He was followed by Nimrod, a decent-looking black specimen. The curly-coated bitch class certainly had one of the most lovely-looking bitches in it we ever saw; a more expressive face one could not wish for, but Chicory must have been overlooked, as in any way, she is better coated than Faith, who took second.

Nothing in the smooth or wavy-coated classes came up to our ideas of perfection; nevertheless, Twilight and Topsy are fair specimens, who deserved their places. Clumbers, Sussex, blacks, and any other variety were capitally placed, barring that we would have wished to see Don Pedro, late Fox, higher in the list, as he is a really good one, and should certainly have been placed over the puppy Foll, who scored second.

In water spaniels, Mickey Free received first and Lorry Doolan second, but we would have reversed their positions, as in coat and type Larry Doolan is vastly superior to the winner.

Respecting fox terriers, one thing, in justice to Mr. Scott, we must mention. The judging ring was so badly kept, and so limited for such large classes, that some of his blunders may be attributed to this cause. There were only two entries in champion dogs, viz., Cob and Nimrod. Cob was placed first, but he is quite twenty pounds in weight, is entirely without terrier expression, and has loaded shoulders, his redeeming points being a fair head, great bone, good legs and feet, and proper coat. In the latter particular he beats Nimrod, who is a terrier, has a good head and ears, is of a working size, has plenty of expression, and ample bone for his kind. In champion bitches the judge placed first Frisky, who has a good head, but the judge like Dora, and we were only fault is want of coat. Lill, the other contestant, was decidedly outclassed. The open dogs were a middling lot of forty-five. Gripper was put first, but he is only fat in coat, has a poor head and ears, is too broad in chest and large in eye for our taste and we think V. H. C. should have been about his place. Racket came second; he is a good all-round dog, barring his coat, and he should have been first. Jovial, third, is bad in face and eyes, and also in forelegs, but is a

good dog over; he was held too high here, however, and his place should have been occupied by Buckle—who was fourth—whose bone, substance, and grand coat and character hardly received sufficient recognition. Bagman, commended, should have been fourth; he is full of character, has a grand head, nice ears, and plenty of bone and coat, and we most decidedly prefer him to the winner. Huxter Dick was very highly commended, which was about right, as he is getting too cleggy. Robin Hood, very highly commended, is good in coat and has fair head and ears. Little Joker, also very highly commended, has a bad head and sour expression, and we thought several better in the class. Tim, very highly commended, is very pinched in the face, and has a large eye and a fine coat. Both these defects might have given his place to Lance, who was, however, in bad form, or Duster II., who has vastly improved, and is a good one all over. Spot, highly commended, is a brute, a sour head and bad body and legs being his leading characteristics. Little Bullet, who was highly commended, has a head like a club, and in fact is a bad one. Cedric II. is a good sort, and is a very good coat and head, lots of bone, and is worth prominent notice in any company. The bitch class was a good one, and Mr. Scott did not, we think, do quite right by putting Lady Grace over that grand bitch Satre, whose well-known character and coat place her far above her here successful rival. These two should have changed places. Cuipe, who took third, is too pinched in the face, and has a bad head, but good in coat and terrier expression; still she was greatly overrated, as there were a dozen in the class better than she. Fourth is a nice little terrier, her faults being her large ears and fine coat. Badinage we should have placed third, as she was in good form, and looking better than we ever saw her; and Lill, unnoticed, should have been in the money, as she is good in head, coat and bone. Galatien, very highly commended, is rather small, but she deserves her place, and Bona-Belle, commended, is a nice one, and might have been higher, although she is a trifle light in bone. The class was a very strong one, but, for some unaccountable reason, the judge did not give any highly commended cards. Wire-haired dogs were a nice lot. Victor, who took first, is a good one, of the right coat, and a terrier; we, however, somewhat preferred Balance, very highly commended. This dog keeps on improving, and he is just about as near perfection as any wire-haired dog now before the public. Toller Broad, placed second, is a good dog, who requires a little more coat. Peter Teazle, who took third, is also a nice one, and better in fact, we think, than Toller in coat, head and bone. Peter (Burgess) has vastly improved, and some thought that he should have been in the money. Paul, highly commended, is too small and toyish. Tyke, highly commended, is a nice one, and was hardly done by; but Venture, highly commended, is far too big, and with unorthodox hind legs, not to be overlooked. The third prize terrier was well judged. Mendicant Broad was easily first; he is a very grand one. Mr. Everett's Tick, a nice terrier, took second, and Impenitiously Broad scored third; he is a terrier, but has not quite enough coat. The rest of the notices were rightly b-stowed.

In dog puppies there was an easy win for Mr. Burgess's Bonus, a very striking puppy, good in bone, head, ears and coat. Second went to Tyeman, a niceish one, but too fine in coat, and not terrier enough. The third prize terrier had good head and ears, plenty of coat, but is awful in his forelegs. Kasper, very highly commended, has a nice coat, and is of a nice size, but has slovenly ears. Working Broad dim is a fair wire hair, a bit leggy as yet, and a trifle too big in ear. Master Joe, very highly commended, is a niceish sort, a bit on the leg at present, with fault, however, may improve in time. Bones, highly commended, is a neatly shaped little dog, but is a little slight in front, and his legs are a little weak. Spig, highly commended, is plenty of bone, but is short and has bad qualities. Harry, highly commended, is a brute, big in ears, and bad in front; but Hammer, unnoticed, should have been second—he is a very smart and showy dog, with a rare coat, lots of bone, and worth half a dozen of those noticed. Bitch puppies were not such a grand lot. First is a wretch, wide in chest, light of bone, with a weak jaw, and is, in fact, about the worst in the class. Flip, placed second, has a nice

Back ribs short, which tend to give a true Irish setter a rather "lucked up" appearance.

Fore-legs very straight and well feathered—longer than in the English setter.

Coat, soft, long, and not nearly so round as in the English setter.

Hind-legs, bent at stifles, with strong locks.

Stern, set on rather low and well feathered, particularly on the middle portion of it.

Color, a deep blood-red. White is not liked in show dogs; but though undesirable, is not a proof of impure breeding. The color of the feathering is paler than that of the body.

Coat, somewhat thicker than that of the English setter, though coarser in texture.

General appearance in an Irish setter goes for a good deal. A good specimen is the beau ideal of strength and activity. He should seem a trifle leggy; no doubt his tucked-up loins increase this appearance, which his extra length of leg naturally develops; and an Irish setter should look all wire and whipcord. In fact he looks what he is, a thorough workman, and ready to gallop for ever.

The dog we have selected for illustration in our colored plate as being typical of this famous breed is Grouse II., who is the property of the Rev. R. O'Callaghan, R. N., before alluded to as one of the great breeders of his national setter. This bitch is by the old champion Palmerston out of Quail, and has been successful on the beach. In 1879, at Dublin show, she won first prize and silver medal and challenge cup. Palmerston, her sire, was by old shot out of Cochrane's Kate; shot by Grouse out of Bruno. Quail, the dam of Grouse, has no pedigree in the Stud Book, but she is credited with winning at Cork in the prize of red bitches. The selection of Grouse, we candidly admit, cost us much anxiety, as we were desirous to select a specimen which is regarded with favorable eyes by authorities who understand this dog, and it was upon the advice of several excellent judges that we asked permission of Mr. O'Callaghan to let his grand bitch be illustrated in this work. The study was executed by Mr. Breach under the owner's eye, and we have to thank him and gentlemen of the punts they took to have the portrait of Grouse made characteristics of the breed.

Following up our rule, we append a scale of points for judging Irish setters, in which it will be seen that we attach peculiar importance to general appearance.

STANDARD OF POINTS FOR JUDGING IRISH SETTERS.

	Value.
Skull—formation of head and muzzle.....	5
Ears and eyes.....	5
Neck and shoulders and chest.....	5
Body, including loins.....	5
Coat and feet.....	5
Color.....	10
General appearance, including stern.....	10
	50

THE SPANISH POINTER.

[From Vero Shaw's "Book of the Dog."]

BEFORE commencing any remarks on the subject of the English pointer it will be necessary to draw the attention of our readers to the dog from which our modern pointers unquestionably sprung. Such was the subject of this chapter, from the crossing of whom with the foxhound or Southern hound—opinions vary on this subject—the pointer as he now exists was originally produced.

In "Cynographia Britannica" Sydenham Edwards writes thus of the Spanish pointer in 1805:

"The Spanish pointer is a heavy, loose-made dog, about twenty-two inches high, bearing no small resemblance to a large Southern hound. Head large, intermediate between the eyes; lips large and pendulous; ears thin; loose and hanging down, of a moderate length; coat short and smooth; color dark-brown or liver color, liver color and white, red and white, black and white, sometimes tanned about the face and eyes, often thickly speckled with small spots on a white ground; the tail thin, smooth and wiry; frequently dewlaps upon the hind legs; the hind feet often turning a little outward."

The Spanish pointer was introduced into this country by a Portuguese merchant at a very modern period, and was first used by an old reduced baron of the name of Bichell, who lived in Norfolk, and could shoot flying; indeed he seems to have lived by his gun, as the game he killed was sold in the London market. This valuable acquisition from the Continent was wholly unknown to our ancestors, together with the art of shooting flying, but so fond are we become of this most elegant of field sports that we now excel all others in the use of the gun and in the breeding and training of the dog.

"The Spanish pointer possesses in a high degree the sense of scenting, so that he very rarely or never goes by his game when in pursuit of it; requires very little training to make him staunch, most of them standing the first time they meet with game, and it is no uncommon occurrence for puppies of three months old to stand at poultry, rabbits and even cats. But as they grow old they are apt to get idle, and to give over the game over the trotting of galloping, and from their loose make and slowness of foot when hunted a few seasons soon tire, have recourse to cunning, and in company let the younger and fleet dogs beat wide the fields, while they do little more than back them, or else make false points. They then become useless but for hunting singly with a sportsman who is not able or not inclined to follow the faster dogs."

There are other varieties of the pointer, as the Russian, in size and form like the Spanish, but not unlike a drover's dog, rough and shaggy, rough about the eyes and ears; color like the Spanish, but often grizzle and white; they differ in some being more rough than others. This is probably a cross between the Spanish pointer and the Barbet or rough water dog. He has an excellent nose, sagacious, tractable and easily made staunch; endures fatigue tolerably well; takes water readily, and is not incommoded by the most cold and wet weather.

In the illustration of pointers which accompanies these remarks of Sydenham Edwards there appears a portrait of a rough-coated dog which is supposed to represent the Russian pointer. This dog resembles in almost every point the pictures we have seen which purport to portray the Russian setter of more recent times. It is therefore, in our opinion, quite within the bounds of probability that the modern Russian setter is very closely identified with the more ancient Russian pointer. The remarks of Mr. William Lort upon the former dog, which appeared in a previous chapter, very

nearly describe the dog written of by Sydenham Edwards, and certainly the latter's theory on the derivation of the breed appear to be possessed of reason. It is, however, more with the Spanish pointer that we have to deal at present, for though practically extinct, his close connection with the modern dog entitles him to respect at our hands.

Mr. Taplin, writing of this dog in the early part of the present century, remarks that: "Every trait upon record respecting their appearance in England is that they were in very early ages introduced from Spain, and that they were natives of that country from which their name was derived. The Spanish pointer in shape, make, strength, seeming stupidity and bodily tardiness is a perfect specimen of the most consistent uniformity; well adapted in all these qualifications to the haughty, somniferous, majestic parade and dignity of the lofty Spaniard, but very inadequate to the life, spirit, agility and impatient energy of the English sportsman. This race of dog in his natural and unimproved state is a mass of inactivity, as is evidently perceptible by his shape and make, in every point of which is displayed the very reverse of speed and action, objects so truly necessary in almost every sport of the field. The pointer of this description is short in the head, broad in the forehead, wide in the nose, expansive in the nostrils, simply solicitous in aspect, heavy in the shoulders, short in the legs, almost circular in the form of the carcass, square upon the back, strong across the loins and remarkably so in the hindquarters. Although this breed, like the English pointer (by the many collateral aids so much improved), are produced of various colors, yet the bold brown liver-and-white are the most predominant. These dogs, slow as they are, and accustomed to fire with quick work before the intended sport of the day is half over, are yet truly applicable to the purposes of those who, advanced in years or laboring under infirmities, feel themselves unable to get across a country in the way they could in former years."

"The pointer we are now treating of, though exceedingly slow, must be generally admitted to be sure; indefatigable and minute in his researches, he is rarely seen to miss his game when game is to be found. When a covey of birds is scattered by repeated shots, and are afterward found singly, the pointer under description has opportunity to display his best ability, in most industriously recovering these scattered birds, the major part of which (if accompanied by a good shot) are generally picked up to a certainty. To the recovery of winged birds the patient perseverance of this dog is peculiarly adapted; and for the sport of snipe shooting alone they are entitled to the preference of every other."

No further description is necessary of a dog which, as we have before remarked, is practically extinct, as specimens which resemble the dog referred to by Edwards and Taplin are very rarely met with. It may, however, be worth considering if a cross between a good specimen—always provided that such can be procured—with a modern pointer, might not improve the latter very considerably. Granted that the present dogs excel in strength and activity, it is still not worth experimenting with a dog concerning whose utility many former writers have spoken so very highly? His nose is certainly a great feature in a Spanish pointer, and though he is in the habit of knocking up, we think that if a little of his blood were infused into the veins of some of our field trial pointers in the present day they would stand a better chance of holding their own in competition with the setter than they have hitherto succeeded in doing.

The illustration that is herewith given of the Spanish pointer is particularly fortunate in portraying his square short head and deep fells to considerable advantage, and his heavy bone has not been lost sight of. As in the case of the Russian setter, it is unnecessary to append a scale of points for judging a breed which is very rarely to be met with. However, it should be borne in mind that depth and squareness of head and immense bone are characteristics of the Spanish pointer which should never be lost sight of.

FIXTURES.

Eastern Field Trials Club—Annual Meeting for election of officers January 11.

Pittsburgh Dog Show—Pittsburgh, Pa., January 17, 18 and 19, 1881. Entries close January 6. C. B. Elben, Secretary; Charles Lincoln, Superintendent.

St. Johns, N. B., Bench Show Jan. 9.

Rock River Valley Poultry and Kennel Club show—Sterling, Illinois, Feb. 10, 11 and 12. B. C. Comerford, Sec.

KENNEL NOTES.

NAMES CLAIMED.

Grouse—Mr. C. T. Brownell, New Bedford, Mass., claims the name of Grouse for his black and tan Gordon setter dog puppy, whelped November 4, 1880, by owner's Dash out of his Maud.

Max Piccolomini—Mr. J. B. Montell, of Astoria, L. I., claims the name of Max Piccolomini for his black and tan setter puppy whelped July 23, 1880, out of Belle by Glen.

May—Mr. J. Heron Crossman, New York city, claims the name of May for white and lemon setter bitch puppy, whelped September 13, 1880, out of Daisy Dean by Lincoln.

Flash—Mr. J. Heron Crossman, New York city, claims the name of Flash for white and lemon setter dog puppy, whelped September 13, 1880, out of Daisy Dean by Lincoln.

Paddy—Mr. J. Heron Crossman, New York city, claims the name of Paddy for Irish terrier bitch puppy, bought of Dr. Niven, of London, Ont., out of Nora by Joe.

Hazel Kirke—Mr. J. H. Winslow, Baltimore, Md., claims the name of Hazel Kirke for his liver and white cocker bitch ten months old, out of imported Elm by imported Shute.

Lucy—Mr. Charles E. Scott, of Schenectady, N. Y., claims the name of Lucy for his liver and white cocker bitch puppy out of Nellie by Rex.

Jerry—Mr. J. J. Donovan, of Boston, Mass., claims the name of Jerry for his Irish setter dog puppy, whelped July 8, 1880, out of Nora by Rory O'More, purchased of Mr. W. A. Pierce, Peekskill, N. Y.

Mollie—Dr. J. S. Niven, of London, Ont., claims the name of Mollie for Gordon setter bitch puppy, whelped September 10, 1880, out of Venus by Chicago, purchased from Mr. James Moore, of Toledo.

Aileen—Dr. J. S. Niven, of London, Ont., claims the name of Aileen for Irish terrier bitch puppy, whelped October 19, 1880, out of Nora by Jerry.

Daisy II.—Mr. J. Wesley Young, of Portsmouth, N. H., claims the name of Daisy II. for red Irish setter bitch puppy, whelped August 30, 1880, out of May by Elcho.

Plunkett II.—Passed ass't surgeon Arthur C. Heffenger, U. S. N., Portsmouth, N. H., claims the name of Plunkett II. for red Irish setter dog puppy, whelped August 30, 1880, out of May by Elcho.

Duncan and Dugald—Mr. Thos. Blyth, of McIntyre, Pa., claims the names of Duncan and Dugald for dark red Irish setter dog

puppies, whelped October 26, 1880, out of owner's Nellie Hattarick (Dick Hattarick-Tyke) by owner's Joel (Champion York-Diffendurfer's Bees).

BRED.

Beauty—Glen—Mr. E. A. Godfrey's champion Gordon setter Beauty to Dr. Allen's Glen.

Belle II—Bray—Mr. J. Otis Fellows, black cocker dog Bray to Mr. Robert Walker's black and tan bitch Belle II.

Gipsy—Joel—Mr. Thos. Blyth's Gipsy (Rodman's Dash-Fan) to owner's Joel on December 31, 1880.

WHELFERS.

Feather—The Riverside Cocker Spaniel Kennel Club's (Claremont, N. H.) imported Feather, whelped July 5, 1880, five liver and white puppies, three bitches and two dogs by imported Snipe.

Maud—Mr. Thos. Blyth's (McIntyre, Pa.) red Irish setter bitch Maud (champion Elcho-Imported, Pa.), whelped December 18, 1880, eleven puppies, seven dogs and four bitches by owner's Joel.

SALS.

Wildfire—Sara Bernhard Whelp—Mr. J. Otis Fellows, Hornell Cocker Kennel, Hornellville, N. Y., has sold a liver cocker puppy, whelped October 17, 1880, out of Sara Bernhard by Wildfire to Mr. J. Smith, New Buffalo, Pa.

Robin Adair—Fannie Whelp—Mr. J. Otis Fellows, of Hornellville, N. Y., has sold an all liver cocker bitch puppy, whelped October 27, 1880, out of Fannie by Robin Adair to Mr. W. M. Boves, New York city.

Prize Belle Whelp—Mr. H. B. Harrison, of Tilsenbury, Ont., (Canada), has sold to Dr. A. B. Clayton, of Chatham, Ont., a blue Belton bitch puppy by L. H. Smith's champion Paris (Leicester-Dart) out of Belle (Pride of the Border-Kirby).

Bramble—Mr. J. P. Kirk, of Toronto, has purchased from Mr. C. Brantley the pure-bred Sussex squirrel dog Bramble, whelped February 8, 1880, imported by Mrs. Bramble, and bred by him out of Ruby—third prize, Alexandra Palace, London, 1879—by Bob, bred by T. Sayers, West Tarring, Sussex. Bob by Kaiser out of Lady, Ruby by Speck out of Rex (2,163). Rex by Rock (4,402) out of Sappho.

Jose—Mr. Charles H. Beddon, of Toronto, has purchased from Mr. C. E. Lewis, of Niagara, the liver and white cocker bitch Rose by Nash's Lake out of his Busy.

Wedgetoot—Messrs. C. B. Cummings & Son, of South Aylesford, N. H., have sold cocker spaniel dog Wedgetoot (Snipe-Idol) to Mr. C. Whitmarsh, Nashua, N. H.

PRESENTATION.

Joe Dora Whelp—Dr. G. A. Took, of Warrington, N. C., has presented Mr. H. C. Williams, of Portsmouth, Va., with a pointer puppy out of Dora by Joe.

Nellie Whelp—Mr. Charles E. Scott, of Schenectady, N. Y., has presented by Mr. Robert Walker, of Franklin, N. Y., with a beautifully marked liver and white cocker bitch puppy out of his Nellie by Ruby.

Snipe-Ruby II. Whelp—Mr. H. B. Richmond, of Lukeville, Mass., has presented Mr. Julius E. Wilson, Manchester, N. H., with a lemon and white pointer dog puppy, whelped August 26, 1880, out of Ruby II. (Snaphot-Ruby) by Snipe (Sensation-Colburn Belle).

DEATHS.

Pallas—Westminster Kennel Club's imported lemon and white pointer bitch Pallas (General Prim-Powell's Queen).

A LATE NOVELTY on the stage is the introduction of live bloodhounds in the everlasting play of "Uncle Tom's Cabin." The brutes are very fierce on the show-bills, but in the theatre warranted perfectly harmless and inoffensive.

—Auburn, N. Y., boasts of many superior setter dogs, but there is not a pug within the city limits.

—LIKE WINE, GROWS BETTER WITH AGE.—A correspondent writes: "FOREST AND STREAM is a most welcome weekly visitor. Like wine, grows better with age. It already wields a large influence with the best and most intelligent portion of the sporting fraternity in this country. There is need of just such a paper, and that you may abundantly succeed is my hearty and sincere wish."

DE. PURNELL'S PRAIRIE CHICKENS.—It seems that the prairie chickens that Dr. Purnell brought to and let out in Sussex County, Delaware, have raised some young, one of which, at least, was shot and brought up to this city. It being about half grown its identity was doubted, but it was afterward settled that it was a young prairie chicken. A writer in FOREST AND STREAM mentions that there were grouse some thirty years ago in the Pocono mountains, in Monroe County, Pa., also in Burlington County, N. J. This is true, as we conversed with sportsmen who had shot them in both places, and several decades ago on the Pocono mountains. We were told, some twenty years ago, that there were both deer and bears in the wild parts of Long Island.—German-town Telegraph.

CONNECTICUT—Granby, Jan. 1.—Foxes are very plenty here this winter and can easily find trail any good day. Rabbits are also uncommonly abundant. N. E.

Sour stomach, bad breath, indigestion and headache easily cured by Hop Bitters.

Kidney and urinary trouble is universal, and the only safe and sure cure is Hop Bitters—rely on it.

OUR HOLIDAY GIFT.—Rolled Gold Solid 18 K. Rings, with initial or motto engraved, sent on receipt of 75 cents in postage stamps or currency. Read advertisement of G. Pettibone & Co. in this issue.

The Rifle.

ANNUAL MEETING OF THE N. R. A.

THE annual meeting of the National Rifle Association was held at the Twenty-second Regiment Armory on Tuesday evening last with a very liberal attendance of Life Members. Gen. Geo. W. Wingate occupied the chair in the absence of the President. Judge Gildersleeve made some remarks on the work of the association during the past year. The report of the Treasurer showed a balance of \$114.22. Secretary Donaldson read his report as follows:

To the National Rifle Association of America:

Mr. President and Gentlemen—This Annual Secretary's Report embraces the year 1880, an epoch in the history of the Association remarkable both for its successes and reverses. In the early spring, the President appointed the usual standing committee for the year, as follows:

Range—Gen. Geo. W. Wingate (Chairman), Col. Jos. G. Story, and Col. Geo. D. Scott.

Finance—Maj. D. B. Williamson (Chairman), Capt W. C. Casey, and Mr. James Grant.

Prize—Col. John Ward (Chairman), Maj Henry Fulton, and Col. J. H. Cowperthwait.

The resignations of Directorships of Messrs. Williamson and Casey necessitated a reorganization of two of the above Committees, which was accordingly made, in the month of March, as follows:

Finance—Mr. Jas. Grant (Chairman), Col. J. H. Cowperthwait, and Col. John Bodine.

Prize—Col. John Ward (Chairman), Mr. N. P. Stanton, and Maj. Henry Fulton.

The vacancy in the latter Committee, caused by the resignation as a Director of Major Fulton, has not been filled. There have been held, during the past year, twelve regular, seven special, and two adjourned meetings of the Board of Directors, and four meetings of the Executive Committee. This Committee has remained intact, no resignations or changes having been made. Of memberships, there is to be recorded an addition to the roll of sixteen gentlemen becoming members for life, of whom thirteen paid the usual fee, two were offered and won as prizes at the last fall meeting, and one was honorary, having been conferred by vote of the Board. Two deaths have occurred among our life members, those of Maj. Chas. A. Coffin, and Gen. Frederick Vilmar, the total number remaining upon the roll at this date being 392. The annual memberships fall below last year's figures by about thirty-five men. Eleven of this class were offered and won as prizes.

But five rifle clubs or Associations have affiliated with us in 1890, viz.: The Amateur Rifle Club of New York, the Empire Rifle Club of New York, the New York Rifle Club of New York, and the Lion Rifle Association of New York, and the Pennsylvania State Rifle Association of Pennsylvania. No military organizations (regiments or companies) joined the Association at the half rates permitted by the By-laws. Three life members' badges were sold, numbered respectively 97, 98 and 99. The Committee which had been appointed at the last annual meeting (1890) to consider the advisability of securing a Managing Director, at a competent salary, to take charge of the affairs of the Association, submitted a written report to the effect that they considered "the objects desired could best be obtained by the passage of a resolution authorizing and directing Lieut. A. H. Weston, the present Assistant Secretary and Treasurer, to represent this Board at all times and in all places, in the absence of any regular Director, with the same power and authority as a director, and that he submit at the Board meetings, from time to time, reports of matters of interest," etc. The report was finally adopted, and the salary of the Assistant Secretary and Treasurer was made the same as that of the Range Superintendent, until Dec. 1, when the salaries of both officers were reduced to \$50 that month, and thereafter at the same rate until April 1, conditional upon funds being received from any source.

On Nov. 9 the following proposed amendment to the By-laws was submitted (duly signed by ten life members, as required) to the Board of Directors, and by that body approved, and its passage duly recommended, viz.: "Amendment proposed to Article III. of the By-laws management to be paragraph 6, viz.:

"Sec. 6. Any of the permanent or honorary ex-officio Directors named in paragraphs two and three of this article may, by a writing filed with the Secretary, from time to time, designate one of their staff or other subordinate officer to represent them at any meeting of the Board of Directors, such officer to have the same powers at such meeting as his principal would have had if personally present."

The Committee appointed Sept. 2, 1879, to revise the Regulations of the Association made a final report on March 2, last, submitting a draft of the proposed new regulations. The same, being approved, was adopted, and 2,000 copies were printed and most of them distributed. No changes have been made in same up to this time.

The elected members of the Board of Directors in January, 1890, was as follows:

Term expires 1893—Col. J. G. Story, Col. G. D. Scott, Mr. James Grant, Gen. G. W. Wingate and Col. H. A. Gildersleeve.

Term expires 1892—Maj. C. S. Schermerhorn, Capt. W. C. Casey, Col. J. H. Cowperthwait, Major D. B. Williamson and Mr. F. J. Donaldson.

Term expires 1881—Hon. D. W. Judd, Col. J. Ward, Major Henry Fulton, Col. E. H. Sanford, and Col. H. G. Litchfield.

On March 2, Major Williamson resigned, and Col. John Bodine was elected to fill the vacancy. On the same date Capt. Casey's resignation was accepted, and Gen. E. L. Molineux was elected in his stead. Business engagements, however, preventing the strict performance of his Directorship duties, Gen. Molineux resigned three months later, and was succeeded by Gen. Robert Olyphant. Major Fulton's resignation was received on Nov. 9, and followed by the election of Col. H. S. Jewell, who declined to serve, and the vacancy has not been filled.

On Jan. 13, Mr. N. P. Stanton, ex-President of the Association, was elected an Honorary Director for life, and on April 6, a like distinction was conferred upon Mr. E. A. Buck, editor of the *Spirit of the Times*. For the regular three year term, Hon. Lovi P. Morton and Gen. Anson G. McCook were elected to Honorary Directorships on April 27.

The resolution passed, early in 1879, laying aside as a sinking fund to be used upon the range for repairs, etc., all moneys received as dues from new life members, was rescinded during the past year, the receipts from this source not being large enough to make the resolution operative according to the original intentions. The offices at No. 23 Park Row were vacated on Dec. 1, for a less commodious, though almost equally serviceable room, at 37 Park Row, whereby a very considerable reduction of rental was obtained. Two thousand copies of the annual report of 1879 were printed in April last, and most of them were distributed to riflemen and organizations throughout the States and Canada. It was hoped that the receipts from advertisements therein would cover the expenses of publication, but, though no canvasser's commission had to be paid, they fell short by over \$150. The regular monthly programmes of matches were issued in larger numbers than ever before, from April to November inclusive.

The Thanksgiving Match of Nov. 25, and the Christmas Match Dec. 18, were announced in special programmes. The Long

Island Railroad Company, claiming to have been much imposed upon by parties, other than those intended, availing themselves of the railroad tickets sold to members of the Association, for transportation to and from Queens and Creedmoor, at reduced rates, devised and put into operation a system of certificate of membership cards which, while fully protecting the railroad company, gave, I believe, general satisfaction to our members. This company, at the beginning of the season, furnished passes to many of our directors and officers, and ran trains direct to Creedmoor, at convenient hours, on Tuesdays, Wednesdays and Saturdays of each week. And the Secretary here wishes to acknowledge the uniform courtesy of Mr. Chas. M. Heald, the General Ticket Agent of the line, who, upon several occasions, has evinced his interest in the Association, by accommodating your Secretary in matters over which he has control.

The troops of the National Guard of this State have used the range almost continuously upon three days in each week, from June 1, to Nov. 1, as in former years.

It is gratifying to note the growing interest taken by the United States Army in rifle practice, and also the increasing proficiency in marksmanship, as seen in the scores of the army teams at Creedmoor during the last Fall Meeting.

The Secretary is pleased to record the names of Maj.-Gen. Winfield S. Hancock, commanding the Military Division of the Atlantic, and Col. J. C. Keltou, Assistant Adjutant-General on the staff of the Commander of the Military Division of the Pacific, both United States Army officers, to whom we are indebted for their earnest co-operation in the objects of the Association. During the past year there have been shot at Creedmoor 111 N. R. A. matches, nineteen of which were embraced in the Fall Meeting, and the remaining ninety-two being monthly and special matches. There was no Spring Meeting, it being surmised that, by its omission, the Fall Meeting would be added to in importance and greatness. That this course was wise and advantageous has not been proven, though the Secretary is of the opinion that a spring opening in April, with one or two popular matches and a large number of prizes, would be preferable and more successful than the ancient, cumbersome spring meetings. The Fall Meeting commenced on Tuesday, Sept. 14, and lasted four days, for records and statistics of which you are respectfully referred to the officer's reports and the tabulated scores in the Annual Report. During the past year the following monthly matches were concluded, the prizes being finally won according to the conditions—viz: Remington Rifle Match, thirteen competitions, six shot in 1890; Remington Shotgun Match, 12 competitions, 8 shots in 1890; Secretary's Match, 7 competitions, all shot in 1890; Champion Marksman's Badge Match, 7 competitions, all shot in 1890; Alford Match, 20 competitions, 16 shot in 1890; the Winchester Rifle, the Remington Gold, the Wo Will, and the Ballard Rifle Matches hold over for another year. At the beginning of the season, with a view to encourage long-range shooting, a series of matches were inaugurated under the auspices of the Association, known as the Weekly Long Range Subscription Matches, the first competition for which was announced for and contested on May 1. Since that time and until the month of September they were published in the regular programme, though not again shot, owing to the failure of two or more competitors to appear. The monthly and special matches of the year, with the number of entries in each and the amounts received as entrance-fees therein is shown:

Individual off-hand—Competitions, 18; entries, 635; entrance-fees, \$683. Team off-hand—Competitions, 6; entries, 64; entrance-fees, \$256. Secretary's—Competitions, 7; entries, 397; entrance-fees, \$195.50. Winchester Rifle—Competitions, 1; entries, 25; entrance-fees, \$6.25. Remington Gold—Competitions, 3; entries, 30; entrance-fees, \$60. Wo Will—Competitions, 7; entries, 37; entrance-fees, \$18.50. Ballard Rifle—Competitions, 8; entries, 134; entrance-fees, \$67. Remington Rifle—Competitions, 6; entries, 54; entrance-fees, \$27. Alford—Competitions, 16; entries, 552; entrance-fees, \$276. Remington Shot Gun—Competitions, 8; entries, 55; entrance-fees, \$110. Weekly Long Range Subscription—Competitions, 1; entries, 8; entrance-fees, \$24. Champion Marksman's Badge—Competitions, 7; entries, 1,084; entrance-fees, \$542. Any Rifle, Individual—Competitions, 1; entries, 195; entrance-fees, \$97.50. Any Rifle Team—Competitions, 1; entries, 20; entrance-fees, \$80. Thanksgiving—Competitions, 1; entries, 349; entrance-fees, \$207.50. Christmas—Competitions, 1; entries, 662; entrance-fees, \$348.50. This gives 92 competitions, with 4,692 entries (of which there were 81 teams of 4 men each), and \$3,603.75 in entrance-fees. Add to this \$149.15 net proceeds of pool targets in entrance-fees, during monthly or special matches, \$19 fines and forfeits collected, and \$112.5 net balance proceeds of First-class Match, and we have the total receipts, \$3,183.15. The following will be of interest:

Matches.	No. of Prizes.	Prizes.	Total Cash and Value.
19 Fall Meetings.....	176	Cash, \$764 00 In Value, \$4,309 50	\$5,073 50
92 Monthly Matches, etc., etc.	612	Cash, 2,483 33 In Value, 1,221 00	3,704 33
111 Meetings.....	815	\$2,844 92 \$4,180 50	\$1,425 43
By comparison with the matches of 1879, a large increase in 1890 will be seen, thus:			
1879.			
Spring & Fall Meetings	12 prizes, including 400	Fall Meeting, 176 prizes, \$1,741 50	
92 Monthly Matches, etc., etc.	612 prizes, \$1,221 00	92 Monthly Matches, 612 prizes, \$2,483 33	\$5,073 50
000.....	\$1,741 50	Fall Meeting, 19 Matches, entrance fees, \$2,071 35	
02 Monthly Matches, 264 prizes, including Every-body's Match.....	1,928 44	entries.....	2,003 75
Spring & Fall Meetings	33 matches, amount of entrance fees.....		
02 Monthly Meetings, 2-602 entries.....	1,263 75		

This shows gains for 1890 over 1879, outside of the meetings, of 30 matches, 378 prizes, \$1,775. 46 cash and value of same, 2,000 entries, and \$1,640 entrance-fees receipts. You are familiar with the facts in reference to the selection of an American rifle team to shoot a friendly match with Irishmen upon their own soil, and the unequalled victory achieved by that body at Dollymount, on June 29, is still fresh in your memories, and I need not to add what, perhaps, you already know in this connection, that our success upon that occasion was largely due to the able captainship of "Old Reliable."

After a service of seven years, our faithful Assistant Secretary, Mr. Weston, has handed in his resignation. This is a loss that all riflemen acquainted with him will deplore, more especially by those who have experienced his uniform courtesy and kindness at Creedmoor, where his pleasant voice and face always seemed to be a

welcome to the shooters. Mr. Weston, I am sure, leaves the N. R. A. with the best and heartiest wishes of all connected with it, and with a record for kindness, courtesy and thoroughness all are proud of. He goes from us, after these seven years' untiring industry in the interests of the Association, leaving behind him none but friends, and we part from him with regret, and with the hope that, in his new walk in life, he may have unbounded prosperity.

In conclusion, I beg to call the attention of the Life Members to the necessity of being represented by Directors, who will take an active, not a passive, interest in its affairs, for there is every probability that during the ensuing year the Association will have only itself to look to for the necessary expenses to keep Creedmoor open. Therefore, your new Directors should be selected with a view to obtaining those who will exert themselves to obtain prizes as well as subscriptions, if Creedmoor is not to be a thing of the past. As general dissatisfaction exists with the management, and as many of the more prominent frequenters of Creedmoor have expressed themselves to the effect that the Lost Interest of the Association would be conserved by the election of an entirely new Board of Directors, and not wishing to be a stumbling-block in the way of such a change, I cheerfully tender my resignation as Director. Respectfully submitted,

FRANK J. DONALDSON, Secretary N. R. A.

The last paragraph raised a storm of objections, and some loud talk was indulged in, ending in the adoption of the report with the exception of that paragraph. The election of Directors resulted in the choice of J. R. Andrews, F. H. Holton, W. W. Judd, A. Alford, Geo. G. Seabury for three years each, and Col. Porter and W. H. Murphy for the one year vacancy term. On motion of Major Henry Fulton it was *Resolved*, That this Association consider it inexpedient to accept the invitation of Earl Stanhope for a match at Wimbledon in July next. This motion he said was made because the Palma was yet in American hands, and this, and this alone was the championship emblem. Col. Cowperthwait seconded the motion and it was carried.

The Board of Directors organized in the choice of E. A. Buck, as President; Geo. W. Wingate, Vice-President; D. W. Judd, Treasurer; F. J. Donaldson, Secretary, and W. H. Murphy, Geo. H. Schermerhorn, Jr., and Col. J. H. Cowperthwait on the Executive Committee.

RANGE AND GALLERY.

BOSTON, Jan. 7.—Mammoth Rifle Gallery.—The opening week in the New Year Rifle Match, at the Mammoth Gallery, has shown some very fine shooting so far early in the month, and the crack of the Maynard, Ballard, Vossou, Stevens and Remington rifles have been incessant. Mr. J. Merrill, of the Massachusetts Rifle Association, was successful in getting a clean score of eight consecutive bullseyes, and receiving \$15 for the same. He made eleven consecutive bullseyes, the same number that Mr. N. W. Arnold made in the any-rifle match in December. These two gentlemen are as yet the only ones who have made clean scores since the new targets were put in the gallery, and to Mr. Merrill and Mr. Arnold should be awarded all praise for their skill and accuracy. Mr. Merrill followed his clean score with a 39, which was a remarkable performance. The proprietor, Mr. W. W. Newton, wishes to announce that he is ready to pay \$15 to any one making a clean score of eight consecutive bullseyes. This places Mr. Merrill in the lead with five scores which will be hard to equal—two thirty-eights and two thirty-nines and a forty, making 194 out of a possible 200. Mr. A. L. Eames is second on the list with 182. Mr. Eames is a member of the Rod and Gun Club of Springfield, Mass. Mr. Geo. D. Edson is third with 179. Mr. A. C. Gould, of the Massachusetts Rifle Association, is fourth with 178, followed closely by Mr. C. R. Bartlett with 178, but outranked by Mr. Gould. Mr. J. J. Ross is sixth with 177. Mr. Newton has lately purchased a new Maynard rifle of .22 cal., and he has now a complete set of gallery rifles. Any one can find their favorite rifle there, and to all who have a Maynard stock, and not a .22 barrel, can bring the stock and fit the gallery barrel to it, and no doubt many will avail themselves of this opportunity.

The FOREST AND STREAM rifle match has not had many entries as yet, it being early in the month, and as the prize is a very handsome meerschaum pipe valued at \$50, it no doubt will prove an incentive for fine shooting before the match ends, and large scores will be in order.

The following are the leading competitors to date in the New Year rifle match (50 yards, rounds 8, possible 40, five scores to win or possible 200):

J. Merrill.....	88	39	39	40	194
A. L. Eames.....	50	36	37	37	160
C. Gould.....	39	36	37	37	151
Geo. D. Edson.....	35	36	36	26	179
C. R. Bartlett.....	35	36	36	27	178
J. J. Ross.....	35	35	35	35	140
A. C. Goodspeed.....	35	35	35	36	141
F. J. Snow.....	35	35	35	35	136
C. Warren.....	34	35	35	35	139
O. T. Hart.....	34	35	35	35	135
H. B. Duley.....	34	35	35	35	135
R. K. Knowles.....	34	35	35	35	135

Pistol Practice.—This favorite arm has also been lively during the week, and the match which began January 1 is fast becoming popular, many availing themselves to practice at this favorable range. Mr. J. Ames, of the Massachusetts Rifle Association, has shown good holding with this arm, and leads the list with 104 out of a possible 120. Mr. F. J. Rabuth is second with 103, and Mr. J. R. Scott is third with 100. The shooting for so early in the month is good, as the following scores will show (50 feet, rounds 8, possible 40, three scores to win or possible 120):

J. Ames.....	34	34	36	104
F. Rabuth.....	33	31	36	103
J. R. Scott.....	33	33	34	100
O. T. Hart.....	33	33	33	99
L. T. Folsom.....	32	33	33	98

MAGNOLIA RIFLE GALLERY.—The shooting has proved quite attractive. In the No. 1 match Mr. Farnham is at the front. In the FOREST AND STREAM match for the elegant pipe, Mr. Edwards is ahead with a good 47. Mr. Wright takes the lead in No. 2 match with 44. Mr. Gilman, with 117 for the pistol, leads all comers for the past week. The following is the result for the meetings since January 1:

Match No. 1.	
W. H. Farnham.....	4 5 5 5 5 4 5 4 5 46

tends over such portions of Lake Champlain as may lie within the State of New York. There can be no doubt whatever on this point.

J. C. S., Swansea, Mass.—1. What kind of game is there in North Park, Colorado? 2. Also in North Platte River, Nebraska? 3. Which is the best place for game? 4. Is there any timber on North Platte River? Ans. 1. Antelope, elk, deer, bear, mountain sheep and a few bison. 2. On the North Platte deer, antelope and perhaps some elk. 3. North Park. 4. None of any account.

TRAPPER.—A receipt for tanning mink and muskrat skins is given as follows: First wash the hide in warm water and remove all fleshy and fatty matter. Then soak it in the following mixture: Ten gallons of cold soft water, to which is added eight quarts of

ten gallons of cold soft water, to which is added eight quarts of wheat bran, one half pint of old soap and one ounce of borax. If the hides have not been salted add one pint of salt. Green hides should be soaked eight or ten hours, and dry ones till they are

soft. For tan liquor, to ten gallons warm soft water add one half bushel of bran. Stir it well and let it stand in a warm room until it ferments; then add slowly two and one half pounds of sulphuric acid, stirring all the time. Let the hide remain in about four hours, then take out and work over a beam until dry.

—Any subscriber or reader of FOREST AND STREAM in want of any kind of carpetings, oil cloths, rugs, etc., etc., can be sure of fair treatment at the hands of John H. Pray, Sons & Co., Boston. Call or correspond with them, and get their prices before buying. It will pay you to try them.—*Adv.*

Nachting and Canoeing.

POUGHKEEPSIE ICE YACHT CLUB.

THE club was organized 1861. The officers for the season 1880-81 are: Commodore, J. A. Rowell; Vice-Commodore, Theo V. Johnston; Secretary, Thos. H. Ransom; Treasurer, Guy C. Bayley. Regatta Committee—Guy C. Bayley, Thos. H. Foster and Clarence Cary. The Regatta flag is blue with P. I. Y. C. in white, and the club signal is a pointed burgee, scarlet field with white device. The Regatta course is around the point of the harbor, the blue center line one third the width of the harbor. The following regattas have been fixed for the winter, and will be carried out as near as the weather will permit: For Club colors won by the Haze, Jan. 27, 1872; by the Restless, Jan. 27, 1877; and by the Hall, Feb. 13, 1879; also for Poughkeepsie challenge permanent. For the Regatta colors won by the Haze, Jan. 27, 1872. This pennant was won by the Ice of the P. I. Y. C. Jan. 27, 1872, and by the Snow Bird of the P. I. Y. C. Feb. 14, 1879. No challenge is pending for this prize at present. A Regatta will also be sailed for the Champion Corinthian Tiller, P. I. Y. C., to be sailed for on the 27th of the month. The course now is that the first yacht should win the first and second regattas, the tiller to become the property of that yacht's owner. If different yachts should win the first and second regattas, a third

THE club was organized 1861. The officers for the season of 1880 are Commodore, J. A. Roosevelt; Vice-Commodore, Theo V. Johnston; Secretary, Thos. H. Ransom; Treasurer, Guy C. Bayley. Regatta Committee—Guy C. Bayley, Thomas Foster and Clarence Ray. The Regatta flag is blue with P. I. Y. C. in white, and the club signal is a pointed burgee, scarlet field with white cross, the cross being a white pennant with the device, a white centre one third the width. The following regattas have been fixed for the winter, and will be carried out as near as the weather will permit: For Club colors won by the Haze, Jan. 27, 1872; by the Restless, Jan. 27, 1877; and by the Hawk, Feb. 1, 1880. The Regatta open to any organized Ice Yacht Club on the Hudson River. This pennant was won by the Icicle of the P. I. Y. C. Jan. 17, 1872, and by the Snow Bird of the P. I. Y. C. Feb. 14, 1879. No challenge is pending for this prize at present. A Regatta will also be sailed for the Commodore's cup, silver tiler, on less than ten miles. If a yacht should win the first and second regattas, the tiler to become the property of that yacht's owner. If different yachts should win the first and second regattas, a third regatta will be sailed for the Commodore's cup, silver tiler, and the second races win the third, the tiler to become the property of that yacht's owner. Should the third regatta be won by a yacht which has not won either the first or second race, then the winner in the three regattas shall sail for the prize under the same conditions as the winner of the first and second regattas. The Commodore's cup is a silver tiler, 17 in. long, with gold cord where the hand rests, and has never been sailed for. There will be also a regatta for a silk pennant, 15 ft. long, with gold stars in the field, offered to yachts of the club carrying 350 sq. ft. of canvas or less.

race shall be sailed, and if either of the winners of the first and second races win the third, the tiller to become the property of that yacht's owner. Should the third regatta be won by a yacht which has not won either the first or second race, then the winners in the three regattas shall sail for the prize under the same conditions, the winner to own the tiller. This prize was made by Tiffany & Co. The silver tiller is 17in. long, with gold cord also in the hand rests, and has never been sailed for. There will be also a regatta for a 15ft. long, with gold stars in the field, to be offered to yachts of the club carrying 350 sq. ft. of canvas or less, to sail for a yacht to own it.

The Poughkeepsie Ice Yacht Club have challenged the New Hamburg Ice Boat Club for the "Challenge Pennant of America." This prize has been offered by the N. H. I. B. C. to any organized ice yacht club in the world, but has not as yet been sailed for.

YACHTS OF THE POUGHKEEPSIE I. Y. C.					
Name	Rig	Extreme Length	Length of Frame	Width Between Runners	Area of Sails in Sq. Feet

Advance	Cat	15	6	11	9	
Foots...	Sloop...	45	6	16.4	386½	
Avanache...	"	45	10	18.6	658½	
Cerulean	"	45	10	16	417½	
Echo...	"	35.11	11	15.5½	12.7	845
Ella...	"	45.10	18	15	15.3	439
Eliza...	"	45	11	15.2	248	3½
Flying Dutchman...	"	35	18.4	16	412½	
Gracie...	"	42	6	20.5	5	493½
Opale...	"	45	14	14.2	15.7	244
Harb...	"	45.11	19.5	14.5	16	648
Haze...	"	68	21.0	22.2	715	
Jack...	"	68.11	29.3	22.7	1,070	
Jennie...	"	42	12	21.8	565	
Sorsam...	"	42	12	8	405	
Rosie-S...	"	45	18.8	18.4	451	
Saphro...	"	47	13.6	16	475½	
Snow Bird...	Cat	47	18	11.11	443½	
Snow Flake...	Sloop...	44.10	16.4	18	475½	
Virginia...	"	41.9	16	15	896	
Wira...	"	42	7	20.5	493½	
Zip...	"	25	9	11.8	145	

SEAWANHAKA YACHT CLUB.—At the annual meeting the following members were elected: Commodore, W. A. W. Stewart; Vice

Commodore, C. S. Lee; Rear Commodore, M. Roosevelt Schuyler
Secretary, O. E. Cromwell; Measurer, A. Cary Smith; Fleet Sur-
geon, Benjamin F. Dawson; Chaplains, William Irwin, D. D., and
George R. Vandewarter, D. D.; Regatta Committee, Robert Cen-
ter, C. Wyllys Betts, Louis P. Bayard, Giraud Foster and James H.
Ruijs. J. M. Beckman and J. Frederick Laws were re-elected

fill vacancies in the Board of Trustees. W. S. Alley, Albert B. Broadway, Sidney De Kay, John Crosby Brown, C. Baldwin Fox,

Thurley was elected members of the club.

YACHTS PHOTOS.—Drentano, of Union Square, keeps a full line of all photos of American and English yachts. The American lot includes several very handsome specimens of the art, notably those

representing the schooner Nellie G., the sloop Sea Bird, a fine deck view of the latter, and the sloop Rebekah. We wish that some one could be found with enterprise enough to photograph New York results; there would be a small mint in the undertaking. As it is

SANDS FITTINGS.—Mr. A. B. Sands, of Beekman street, has

long made yacht plumbing a specialty that he may now be said to have captured the entire American market. His work is unequalled in strength and finish, and his long experience in fitting

COMPARISON OF YACHTS.—The paper of Mr. Hyslop, in the FORBES

AND STREAM Dec. 16, on stability of different models, I regard as valuable. He could have made it of more value, however, if he had made his calculations on midship sections of the same displacement as displacement cannot be left out in comparisons be-

posed to frictional resistance, demands serious consideration, and the resistance due to friction probably amounts to as much as

some models, as that due to other sources, of which the midship section is the chief factor. The problem for yacht designers to solve is this: As water lines are supposed to be perfect, or as near perfection as they will probably ever be, to inclose the required

midship section by a line which will give the greatest possible

stability with the smallest possible surface exposed to frictional resistance, and permitting a form productive of the least wave making resistance at the same time.

NATIECUS.

RACINE CANOES.

MAKING boats by machinery has certainly been brought to a high state of perfection by the Racine Boat Company, whose headquarters and salesrooms are located in Chicago. The claims set forward in favor of the lightness and strength of boats made



RACINE SAILING CANOE.

from as few pieces as possible are rational enough, and if extended practice does not develop any serious defects in the new veneer canoes, they will acquire an enviable place in the estimate of the housewife of sportsmen and others who find some sort of boat an indispensable adjunct to a full equipment. The excellent qualities

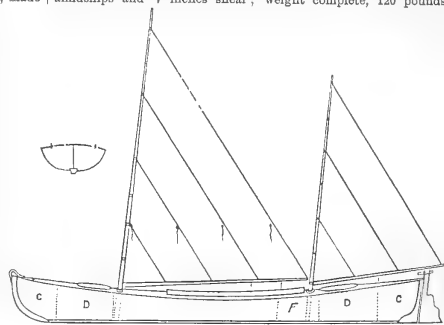
are about one-eighth of an inch thick, will not warp, and are sufficiently elastic, with a strength far in excess of the strains a canoe or boat is likely to be put to. With fair usage these boats ought never to leak, and, when supplied with water-tight compartments at the ends, marked A in the cuts we present, they are life-boats to be relied upon in all emergencies. These compartments, we believe, are fitted to every boat turned out from the company's factory.

That the claims of strength, lightness, beauty and speed, made for boats manufactured on the plan described, are well founded can hardly be questioned. Light weight, when not obtained at a sacrifice of other needful qualities, will commend itself to all for ease of portage, of handling and housing, and also for paddling and the greater load of game or traps that can be carried. The builders of the Racine boats very naturally demand that reasonable care be taken for the preservation of their work; that, if strong and light at the same time, a certain and not very irksome amount of attention is indispensable to the retention of both beauty and condition. These boats should be housed when not in use; hauled up, sponged out and turned over in camp. When wear appears a fresh coat of varnish must be applied, and if wanted for immediate use, within an hour or so, shellac varnish instead. If you can afford a couple of days to dry, hard oil finish is the most lasting. Should a wound be made, rub the place dry and apply a coat of shellac varnish. If the wound is deep, remove loose splinters and fill the spot with paste, a small supply of which is sent with each boat, and let it harden. With these directions the life of a Racine boat extends over many years. The following models and fittings are now furnished, but should in the future some new type come into vogue, the company will no doubt keep pace with the times and supply modifications as wanted.

The illustration of a sailing and paddling canoe is a perspective of what we may call the Racine combination for general use. The hull is 13½ feet long; beam, amidships, 28 inches; depth, 10½ inches at side and 12 inches in the center; cockpit, 5 feet by 20 inches; sheer, 7½ inches. Air chambers and compartments for provisions at each end. Back-rest, a cushion capable of being used as a life-jacket, waterproof apron, double-bladed paddle, rudder with foot gear, and also a temporary keel for deep-water sailing are furnished with the canoe. The weight is from 75 to 85 pounds, according to the rig used, and the prices vary from \$50 to \$75, according to the finish. The sharpie rig has a mainmast of 11 feet and a dandy 8 feet; or, if preferred, a lug-sail can be furnished as depicted in the illustration.

Of deck, 5 inches; cockpit, 7 by 2 feet; weight, without rig, 100 pounds. The badger is finished in five different styles, painted dry grass color, with one or two sails, varnished and brass trimmed and full finish throughout. The prices vary accordingly from \$50 to \$75.

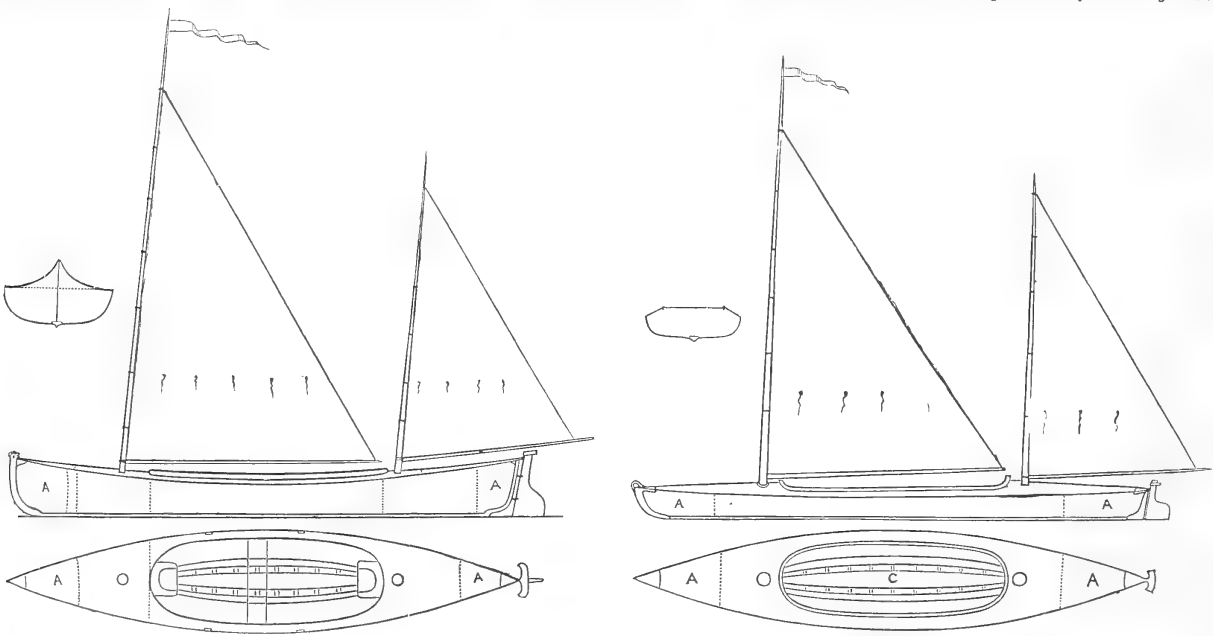
For general pleasure purposes the Racine family boat has all the qualities desired—light pulling, stiff, handsome, buoyant and unsinkable. Length, 16 feet; beam, 38 inches; depth, 12 inches amidships and 7 inches sheer; weight complete, 120 pounds.



SAILING AND PADDLING CANOE.

Oars are 10 feet when pulling them single, and 8 feet if pulled in pairs.

The family sail boat is similar to the one just described, but has more deck at each end. The mast is 16 feet above deck, boom 8½ feet, and the sail of the leg-of-mutton style with a single row of

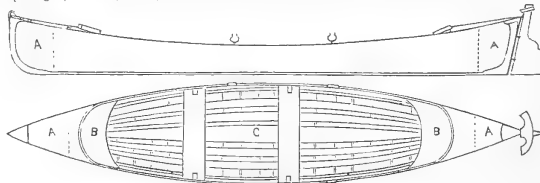


DOUBLE CANOE

of the Racine canoe have been attained by gradual and carefully conducted experiment, extending over two years or more, during which time the necessities and preferences of the public have also been carefully noted, so that in the models now offered the originators can fairly expect to meet existing demands with the utmost confidence. The undertaking was a bold one, for all old methods were so widely departed from that next to nothing in the way of precedent existed, and we believe it mainly due to the indefatigable exertions of Mr. Durand, the superintendent of the Racine Hardware Co., that so thorough a success has been achieved in something so original. The principal peculiarity in the "manufacture"—for the new canoes cannot be said to be built—is that they are stamped out much in the same way that tinware is, by special machinery, and special adaptation of the material used. The latter consists of thin veneers of birch with ash and cherry for the limited stiffening and framing required. The veneers are combined in several thicknesses through the intervention of waterproof fillings and varnishes. The boats are stamped out in halves and joined under the keel, where the only seam is to be found, both bow and stern being neatly sheathed with brass, after the manner of paper-racing shells, giving at once a strong binding—ends which will stand chafe and wear—and a stylish finish. The sides, when varnished, are like the finest carriage work in smoothness, and present a hard and glossy surface to the water, so that friction is reduced to the minimum attainable. The deck is without a joint, and the seam underneath is cemented and closely riveted between keel outside and keelson on the interior, rendering leakage impossible, and a very strong construction is the result. The veneer for the sides is selected, and the grain in the several thicknesses is crossed, the whole being subjected to great pressure after paying with waterproof cement between, a suitable die and mold being used to impart the shape to each half. A gunwale strip is let into a rabbet at the upper edge, and the fastening being done in such a manner that no screw or nail-head is exposed to the water. The sides

The double cruising canoe will appeal to many who prefer company and wish to have some one sail "in the same boat," and is appropriate also for family use, especially if the gentler half of the household exhibits a penchant for a husband's adventures upon the deep, or if younger blood is about to make a life-time contract of absorbing interest. Owing to possible absence of mind during a critical moment, ample beam in this canoe is intended to keep up the proper stability of affairs. The "double" is 16 feet long, 38 inches beam, 12 inches deep at side, 7 inches sheer, and weighs 120 pounds. Mainmast, 15 feet; dandy, 11 feet. Capacity, two canoeists and 500 pounds luggage besides. The air-tight compartments are indicated by the letter A. The price, brass trimmings, braced sheets and halliards, jointed double paddle, rudder and foot gear, life-jacket and mattress combined, is \$85. The qualities of a sailing and paddling canoe are always difficult to combine satisfactorily in one and the same boat, but the annexed diagrams, representing the Racine cross between the Rob Roy and Nautilus, will commend themselves as a very fair combination. The provision hatches are shown at A, A, the bulkheads of the same at D, D, and the water-tight compartments at C, C in the extreme ends. E, E shows the mast steps, F, the back-rest in the cockpit, K and R general storage. The rig is that of the sharpie.

The Racine badger, an improved sort of sneak box, suitable for ducking, hunting and traveling, will carry two or three persons. Length, 16 feet; beam, 38 inches; depth at side, 8 inches; crown



RACINE FAMILY BOAT.

point. She will carry five persons and float that number when filled with water. The varnished boats show the grain of the birch and are very attractive to the eye. Besides the models centralized, the Racine Boat Company build open canoes of 50 pounds weight. They make a specialty of all the fittings belonging to a full equipment, among which we may make special mention of a life preserver, 42 inches long, which serves as a cushion, a life-belt, or as mattress for the camp, weighing but little over one pound. It is sold alone for \$1.50, or with the boats as part of their outfit.

We have recently received the "lines" of a new and improved Shadow model, which the company are now prepared to put upon the market. A sample of this canoe was recently on exhibition at the American Institute Fair, and attracted much attention by her well-digested model and fine finish. Commodore C. E. Chase, of the J. C. C. Co., may with justice claim some of the credit of her production, a fact to which, we believe, the Racine Boat Company will readily bear testimony. The Commodore, on an extended tour paddling and sailing the beautiful streams and lakes of Wisconsin last year in his well-known Dubble, gave the Racine builders the benefit of his experience, which was cordially accepted and worked up into one of the best models for a "paddleable sailing canoe" in existence. She looks to us like a very able, stiff boat, without the very flat floor which makes the Eastern Shadow slow and loggy under paddle. The masts are stepped 42 inches from bow and stern for a sharpie rig, which, by the way seems to be coming into very general use for canoes, and which to us seems the handsomest of all. The new Shadow has an inch keel, moderate grip, and only little rake to the post, the idea being to obtain longitudinal section for windward work without centreboard or leeboard. Reports concerning the behavior and speed of this Racine Shadow are very satisfactory. Racing shells have been turned out on the same principles, but in them we presume the chief advantage is their low price, as it would seem next to impossible to save weight on the best examples of cedar or paper shells.

ELECTRICITY AND SALTED HERRINGS.—Had any scientific enthusiast of the last generation announced his belief that the progress of electrical science would directly affect the supply of herrings to those inland Catholic countries where they are—when salted—in such demand for food on fast days, his friends would have been anxious concerning his cerebral welfare. As a matter of fact, this is now the case. The Norwegian coast is girdled by 1,200 miles of herring telegraph wire, and telegraph stations are established on the barren rocks of the Lofodden Islands, and in the hollows between the dark precipitous cliffs that form the Arctic face of Europe. Here, among the screaming seabirds, a watch is kept of the movements of herring shoals.

Miscellaneous

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Polished brass plain handle with stop.....	.65	.70	.75	.80	.85	.95	—	—
“ “ balance “ no “.....	—	.75	—	.90	1.00	1.15	—	—
“ “ with bushed bearings, click.....	—	1.35	1.45	1.55	1.65	1.95	—	—
“ “ hard rubber, bushed bearings, click.....	—	—	—	2.75	3.00	3.25	—	—
“ “ best q'y. (Abbey pattern).....	—	—	8.00	8.00	9.00	10.00	11.00	—
“ “ brass, plain handle, multi p'g with stop.....	—	1.30	1.40	1.50	1.60	1.75	—	—
“ “ balance “ “ better q'ty.....	—	2.20	—	2.40	2.60	2.75	3.25	3.75
“ “ “ “ “ best “.....	—	3.00	—	3.25	3.50	3.75	4.25	4.75
“ “ G. S. balance handle, “ “.....	—	4.50	—	5.00	5.75	6.50	7.25	9.00
“ “ hard rubber balance handle, multi p'g, best quality, steel pivot, with adjustable click (Imbrie pattern).....	—	—	—	—	11.00	12.00	14.00	16.00

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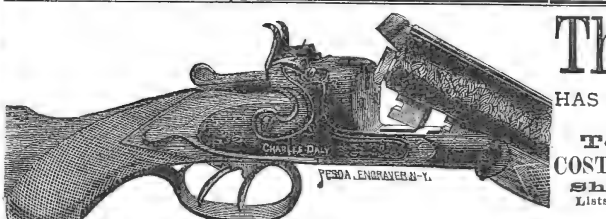
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Sundays, 9.35, 10.35 A.M., 1.35, 5.35, 7, 10 P.M.
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Brooklyn Beach, 8.35, 11 A.M., 4.35, 5.35 P.M. Sundays, 9
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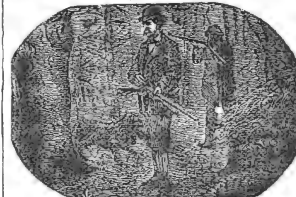
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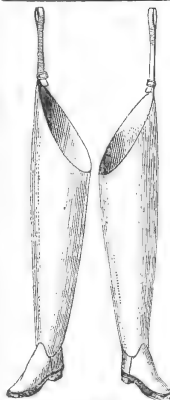
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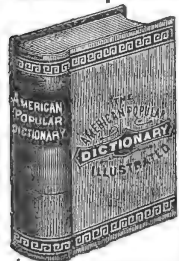


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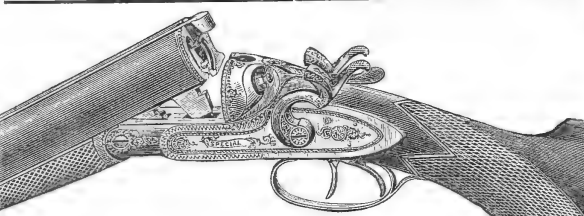
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FOREST AND STREAM.

NEW YORK, THURSDAY, JANUARY 20, 1881.

THE REFRIGERATOR AMENDMENT.

THE proposal to sell game all the year around in the New York markets has aroused the indignation and alarm of sportsmen throughout the State. We are in receipt of private letters upon the subject which show that the view of the case advanced by the *FOREST AND STREAM* last week is that view which appeals to the most experienced sportsmen of the land. We publish in another column communications from gentlemen who understand thoroughly what such a law means, and we have on hand other letters of like tenor which will be printed next week.

Of the evil effects of such a system there is but one opinion, and that a very decided one, that the effects of the open game market would be ruinous to our game. We trust that the public sentiment, which is so unmistakably in opposition to the proposed amendments, may be sufficient to deter the promoters of the bill from presenting it.

THE INTERNATIONAL MATCH.—It must be regarded only as a misfortune if the invitation of the British riflemen for a long-range match at Wimbledon during the coming summer be allowed to drop into neglect. At any rate, those sending the kindly note for a contest are entitled to something more than a lazy intimation that we find it "inconvenient" to send over a team. There is too much appearance of studied avoidance of a square issue in the use of such indefinite phrases. If we cannot afford to send over a team, then let that be said fairly and openly. If the point is made that the Palma represents the championship of the world at long-range team work and that we will stubbornly refuse to acknowledge that any other match is to be thought of so long as this remains in the way, then the issue is a plain one, and there will be no difficulty in getting an expression of opinion that the Palma has been a stumbling-block from the start and seems destined to become the greatest incubus ever laid on American rifle practice. Let the new Executive Committee of the N. R. A. take the matter in hand regarding the vote of the life members only as a suggestion and at least give a fair, open, American reason for sneaking away from the only match ever offered us by the only other National Rifle Association in the world.

THE MICHIGAN STATE SPORTSMEN'S ASSOCIATION will meet at Lansing, January 25.

THE HATCHERY AT NORTHVILLE, MICHIGAN.

WE recently visited the hatchery station of the U. S. Fish Commission at Northville, Mich., where the whitefish (*Coregonus*) are being so extensively hatched for distribution in the lakes and to such other parts as is deemed necessary. The Superintendent, Mr. Frank N. Clark, showed us over the establishment, and we were much pleased with it. It is situated on a slope across the road from Mr. Clark's house, and the roof of the hatchery is no higher than the road; the building is a single story frame, with side windows, and is eighty feet in length by thirty wide; in one end is the office and a workshop, while the filters and ice room are in the rear.

The question which agitated fishculturists some years ago concerning the hatching of the whitefish in spring water, thereby bringing them out earlier than in the colder waters of their native lakes, still has its partisans, and Mr. Clark has hit a medium course. By making a cooling pond and carrying the water from the spring to the further end of it in a shallow trough exposed to the air, and then further exposing it in the pond he gets the temperature down as low as is possible in the coldest weather, using ice if warmer, and so retards the hatching until toward spring. Mr. Clark has been bred a fishculturist, his father, the late Nelson W. Clark, being one of the pioneers in the business, and his success with the shad and whitefish has been uniformly good.

The hatchery is equipped with five troughs, each fifty feet long and a foot wide, divided into thirty-two compartments, seventeen inches long, filled with the "Clark hatching box." Each of these compartments contains seven trays capable of holding 10,000 eggs each. Besides this there are sixty "Chase hatching jars," six inches in diameter, sixteen and a half inches deep, with a metal top two and a half inches high, capable of holding 125,000 eggs each, making the capacity of the house 25,000,000 eggs, which can be increased, if necessary. At the time of our visit, December 17, there were only 13,000,000 eggs in the hatchery on account of the storms and bad weather which prevailed during the time when the fish were spawning, many eggs having been frozen, it having been a most disastrous season for the fish culturists generally who attempted to gather the eggs of the whitefish. Our readers are familiar with both the "Clark box" and the "Chase jar," and so we will not enter into an explanation of them. It was curious to note the different appearance of the eggs from Lake Erie from those of Lake Huron, the former appearing light colored and the latter a decided yellow; and Mr. Clark says that the fish differ, those from Lake Huron having black fins and a black back, while the Lake Erie fish have pale fins and a greenish back, and he claims that their heads are shaped differently. He keeps these eggs separate and will plant each in its own locality, for it is said that the Lake Huron fish does not sell as high in New York market as the other. The Lake Huron eggs are taken at Alpena, Thunder Bay; they are transported to the hatchery in flannel trays. In the practical working of a large hatchery the "self pickers" require assistance, as many good eggs will pass out of the gate with the bad ones, and a siphon of glass is used to remove most of the dead; but this also picks up some good ones, and so they are put into a jar by themselves for future picking when the bad ones get worse and can be more readily separated; still it is an improvement on the old-fashioned picking with nippers which is very tedious. The jars are arranged on the sides of these troughs which are placed over each other, the top one supplying the top tier of jars which empty into the second trough which supplies the lower jars, which in turn empty into the bottom trough. White fish eggs measure, according to Mr. Clark, eight to an inch, and 36,000 to a quart.

Retarding the development by ice is a favorite experiment with the superintendent, and we saw his refrigerator filled with eggs where the thermometer stood at 31 deg. Fahr., as it had done for the last twenty days, and the eggs were quite icy on the outside, often being surrounded by a film of ice, which had made on their surfaces without the egg itself being frozen, owing to the circulation of the blood developing heat enough to resist a temperature no lower than that. The eggs lay upon cotton flannel trays in a double box well packed with fine ice. His father had a box of this kind patented

and the son has improved but not patented it, he having concluded that fishcultural patents are not good. He thinks he can keep the eggs for six months and then hatch them; the only care he gives them is to see that the trays are kept damp.

The house is also used for the breeding of salmon and trout, many thousand quinnat-salmon being hatched and distributed here as well as a few of those Western brook trout (*Salmo irideus*), which have so many common names that we cannot select one, and so we are waiting for some one in authority to choose one for us, for we will not call them "California trout" for the reason that we object to the same name for the salmon; it is not its name in its own home, and there are a half dozen salmon and trout in that State. The young *irideus* in the ponds are lively and healthy, and may be kept for breeders; they were hatched on the 17th of last May, and belong to the U. S. Fish Commission, as do also a few adults. Other ponds contain yearling quinnat salmon and a few brook trout, and altogether the establishment is in good shape and excellent working condition.

THE SHINNECOCK BAY DEATH-TRAP.

OUR readers will remember that this beautiful bay on the south side of Long Island was closed by a storm which filled the inlet with sand about the middle of September, and that we cried aloud to have it opened, so that the millions of young fish which had been bred in its waters might go forth on their migrations and return to breed, instead of perishing in their prison and polluting its waters so that breeding fish would not enter it next season. Many other papers took up the cry, and those in authority made a stir as if they would do something, but afterward agreed among themselves that this something should be postponed until their fall plowing was completed and the fish had a chance to die. The blue-fish, weak-fish and other migratory species died, obstinately refusing to wait the leisurely motions of their jailors, and thus by their foolish prejudices against being frozen, in water which was becoming fresher than suited their palates, deprived the people of Long Island and New York not only of the amount of food which they would have grown to, but also of a crop of young fish which might have descended from them. Perhaps the Commissioners appointed to locate the inlet, after seeing the perverseness of these fish, became indignant and refused to dig. If so their dignity prevented them from plowing up the sand to let the sea-water in, and so the fishes let their sands of life run out.

It was Mr. William N. Lane who proposed to make a lane to the ocean at his own expense, if allowed, whereby the fish could travel from the Good Ground of the Island to the better ground of the Atlantic, but this offer was not accepted by the Commissioners, who may have had good grounds for declining an offer which brought them in no fees; and so things ran along until some three weeks ago old Boreas bored a hole through the beach in the western part of the bay and let in some sea-water, but too late to save the fish, which were in a bad pickle already.

Mr. Lane writes us that this inlet is in good running order, and is the best one they have had for years, being over one hundred yards wide and a good depth from bay to sea, and all that now remains to be wished is that the flow may be great enough to purify the bay before the arrival of the spawning fish now absent in warmer waters.

THE WISCONSIN STATE ASSOCIATION has undertaken a most laudable work, and none too soon, in its endeavor to check the steady diminution of the game and fish in that State. The meeting of the Society at Milwaukee, of which a report will be found elsewhere, brought together a company of earnest men whose discussions and transactions showed that they appreciated the importance of the stated objects of their organization. If the same spirit pervades the subsequent meetings of the Association Wisconsin game will be cared for.

Among the laws which the game committee of the Society proposed was one restraining the exportation of venison. This provision we hope to see presented to the Legislature and passed; for this is the only possible way of checking an export trade in game which, unless stopped in some such way, must inevitably deplete the Wisconsin forests once and forever.

The bait with which we caught these fish consisted of not quite two salmon, which we cut into pieces, about 2 by 4 inches. These salmon we procured right alongside the boat, by fishing with hooks attached to lines about six feet long, which were buoyed, and a line from the buoy to the boat.

permitted us to haul it to us when we saw it dip, and bring up a ten or fifteen pound salmon which had swallowed the herring and the hook. These herring were caught by two small boys, who were engaged about one hundred yards from the shore. Two were about five hundred in jerking through the crowded school, which their canoe was floating among, sticks armed with projecting sharp nails. Nearly every jerk brought from one to a dozen herring to basket. I bought of these boys a basketful, perhaps a couple of dozen, for a cod fish hook, and when through fishing our return for that penny spent for bait, and a dollar to the Indian who showed us to the bank, was nearly a ton of fine halibut, six or seven salmon and a dozen or more herring.

The water was choppy, and work soon became hard, and we were all glad when our hour was up and we could start for home. The Indians assured us that all the year the fish were equally abundant.

That evening, after a comfortable supper, as I sat smoking my pipe, I could not fall to musing and contrasting my position with that of other men, who had spent all of the same day, perhaps, in labor of the same nature as had tired me thoroughly in an hour. In the cosy and tidy cabin of the *Favorita*, and she moved safely in a land locked harbor, not over a mile from the fishing banks, where I had for mere sport caught halibut at such a rate, that were I able to withstand the physical strain of eight hours a day of just such labor, a single month would suffice for me, single handed, to give a hundred ton schooner her fare. Eight of us, working together, at the same rate and within two weeks of her leaving Portland, the schooner could have her catch in the market.

And while catching these fish I underwent no more hardship, nor as much, as a basket of trout has often cost me, and had experienced no more dangers than had I been still fishing for bass in the St. Lawrence or Ontario. And my expenses— a cent for bait, and with that bait plenty of fish thrown in (for the catching of half a dozen fine salmon is not an amusement to be despised), and my dollar to the Siwash— was but slight interest on the money I have paid to guides for far less services.

I contrasted all this with the cost to our Gloucester men, with far less results in proportion. I thought of the bearded and old stained decks, and close, greasy and foul smelling cabins, with the captain and the crew, and the cooking stove and the bunks crowd each other; of the pitching and tossing to the ground swell on the banks, the drifting and dragging and fouling in icy north-easters, and of the fate of those who through gales or icebergs, or being run up by steamers, failed ever again to glide in past the "Ten Pound Island" light, and for whom wives and children wait vainly until they are sure that they have become widows and orphans.

Of the five hundred vessels which compose the fishing fleet of Gloucester, and the five thousand of their crews, every year takes from them a large percentage, and, if I remember correctly, one year thirty of the fleet and over two hundred and forty of the crew were lost. In one single gale one hundred and forty-three men perished and thirteen vessels were lost.

These five hundred vessels bring to market over three million dollars worth of fish yearly, but these fish cost heavily in life and property.

What a waste of life and property, if an equal number of vessels were employed, would be nearly as great, and the expense and danger less.

From 1873 to 1876 inclusive, an average of eight vessels yearly, with tonnage from forty to one hundred and forty, averaging eighty tons, have fished upon the Shumagin banks. Their catch in the seven years was over four million pounds of fish, worth in San Francisco four cents per pound or \$160,000.

The vessels belong to the Pacific Fish Co., have a station on Adak Island and a cannery establishment opposite to Saucelle in San Francisco Bay, obtaining salt at Redwood City.

The above results are from summer fishing alone, and on this coast, thanks to the wisdom of Mr. Seward, there is no heavy bill to pay for bait and privileges.

But while the mass of our people adhere to the prevalent belief that in Alaska we have obtained a sterile, barren, worthless, ice bound land, too poor to even be entitled to a government or the protection of law, the Hoonahs will remain in unmolested possession of the coast, and draw from them their yearly title, and as long as their men and children will continue to gather undisturbed all that they wish of splendid herring, which are in myriads, and to collect the spaw on bushes planted at low tide, encrusted an inch deep after a few overflows with a most excellent food.

When the fishing season has ended, by the Indians having taken all that they wish, it is followed by the first season of sea-otter hunting.

I will not do the noble animal the injustice of more than introduction at this end of my letter.

In my next I will tell you about him, his habits and the mode of capture, as told to me by "Hoonah Dick." PISCOP.

THE OLD "SPIRIT" COTERIE.

IN the excellent articles of Col. Thos. Picton, Gen. Sibley ("Hal, a Dacotah"), and Isaac McEllan, referring to the old *Spirit of the Times*, its tall editor and gifted corps of contributors, a few notable ones, still surviving, who wrote for the columns of that rare old journal, received no mention. Among the most conspicuous is "Ned Buntline," the hero of three wars, and still one of the popular writers of the day, whose contributions adorned the old *Spirit* in its palmiest days, and later of the *Forest and Stream*. As an angler, "Ned Buntline" is *an fait*, and his adventures with gun and rod in all parts of the Union would fill a large volume. His picturesque home, the "Eagle's Nest," near Stamford, N.Y., is a spot of romantic interest. The name, it is stated, is the same as that of a little hermitage wherein he once dwelt in the Adirondack wilderness, where he was one of the earliest campaigners, and whose lakes and streams, many of them, bear the names he gave.

Another notable, then known under the nom de plume of "Young America," is Col. Alban S. Payne, the identical man who "struck Billy Patterson." Col. Payne, or "Nicholas Spicer," as he is now more familiarly known, is an eminent physician, one of the professors at the Southern Medical College and a capital writer, whose contributions to various sporting journals have rendered his name famous.

Hon. R. B. Roosevelt, author of "Superior Fishing," "Game Birds of the North," and other works of rare interest, was also one of the "free lancers" who wrote for the old *Spirit* in his youth, and in later years has written voluminously for the journals devoted to sports of field and stream. Mr. Roosevelt is known as an enthusiastic sportsman, who has assisted in the organization of several societies for the protection of fish and game, as nearly all the older readers of *FOREST AND STREAM* are aware.

Francis A. Durivage ("The Old 'Un") and Geo. P. Burnham ("The Young 'Un"), joint authors of that humorous work "Stray Subjects," and both popular contributors to the old *Spirit*, are still living—the former in New York, the latter at Melrose, Mass.

Among those who have recently passed to the "shadow land," and who formerly belonged to the brotherhood alluded to, memory recalls several distinguished gentlemen, notably James Oakes ("Acorn"), the warm friend of Frank Forester, Edwin Forrest and Hawthorne; Thos. B. Thorpe, the famous author and artist; Genio C. Scott, author of "Fishing in American Waters;" E. E. Jones, one of the proprietors of the *Spirit* during the later years of its existence; and C. A. Bristed ("Carl Benson"), the classical writer.

Of the scientific writers, whose names are familiar as household words among the sportsmen of the land, suffice it to say that they were the peers of the leading sporting authors of England and that, as Herbert once truly stated, Nimrod, T. Ilfrey, Berlesford and other popular writers upon field sports in Britain, would lose none of their laurels to be compared to their trans-Atlantic brothers of the quill. W. W.

Natural History

PROTECTION OF SONG AND INSECTIVOROUS BIRDS.

I HAVE read Mr. N. Pike's letter to farmers in *FOREST AND STREAM* of December 30 with much interest and fully agree with him that some of our smaller birds should be carefully protected and cherished; yes, I will say all birds, until they are proven conclusively by scientific research to be noxious. Birds, especially such as are singers or beautiful, even if they are strictly neutral so far as we are concerned, neither doing us harm nor good, should be protected by stringent laws and by the sense of decency and common consent of all. But birds that are proven very noxious to one or more classes of our rural people should have no protection, any more than rats or mice.

I write this to say that I find Mr. Pike advocating the same error that the great majority of people do who have not investigated the subject, to wit, that because a bird is strictly insectivorous in its food habits, therefore it is most certainly beneficial and should have protection. Now, there cannot, in my opinion, be a greater mistake than this. It is true the martins, swallows, swifts, whip-poor-wills and night-hawks feed entirely on insects, but the question very naturally occurs to the scientific man, What species of insects? For the entomologist knows full well, and to a certainty, that the great enemy of noxious insects, their great destroyers, are other insects—parasitic and cannibal insects; and he also knows it to be an absolute fact that birds do not eat, and therefore destroy, the insects generally known as the most noxious. For instance, what birds are known to destroy the five, prominent potato beetles, or the chinch bug, the canker worm, the tent caterpillar, the squash bug, the cucumber beetles, the cotton bug, the cotton worms, the codling moth, the plum curculio, etc., etc., to say appreciable extent? And it is also a fact that many of these above named most destructive insects have very few effective insect enemies. But there are hundreds of other equally or more destructive insects that are only kept in check by their insect enemies, and not by birds.

Now, if Mr. Pike's society will only teach the birds to destroy our insect enemies, and not our insect friends in the shape of cannibal beetles, ichneumon wasps, chalcids, and other parasitic flies, ladybugs, etc., etc., we will all go to breeding and protecting the birds. But we know that this cannot be done; therefore, until it is definitely settled by scientific research into the food of insectivorous birds, and in this way decided conclusively whether a certain species of bird does or does not destroy more of our friends among the insects than it does of our enemies, we cannot safely recommend the conservation or the destruction of any of our birds. And I will here boldly say that it is my belief that the strictly insectivorous birds named above, which feed on the wing, entirely on insects, are the most noxious birds we have. Their food will be found to be made up in great part of our best friends without which we could not probably exist, to wit, gnats, flies and ichneumons, which in their love flights fill the upper air in myriads. And I am happy to state that the subject of the food of birds is being carefully and scientifically investigated by Prof. S. A. Forbes, of the Illinois State Normal University, at Normal, Ill., under the auspices of the Illinois State Horticultural Society. He is a most competent person, and has taken hold of this herculean task with all the care and vigor of a great power. I would recommend Mr. Nicolas Pike's most commendable society to procure his reports so far as published, and read them.

D. B. WEIR.

Lacon, Ill.

A review and abstract of Prof. Forbes' important paper on "The Food of our Thrushes" will be found in *FOREST AND STREAM*, Vol. xv., p. 244.

IN THE PHILADELPHIA ZOO.

THE Zoological Society of our city has a very rare and extremely interesting animal in their collection, a lemur, which has been caged in a monkey house for three years. I am told that there is no other in this country. Mr. A. E. Brown, the superintendent of the garden, states that the group of lemurs is remarkable for its combination of forms, and it is very difficult to place satisfactorily as it has alliances in three directions with *Primates* (monkeys), with *Rodentia* (gnawing animals), and with *Insectivora* (moles, shrews, etc.). By most of the recent systematists they are considered as a subdivision of the highest order of mammalia as follows:

Order, *Primates*, Sub-order—*Anthropoidae*, man; *Simiidae*, apes; *Lemuridae*, lemurs.

This little animal is about the size of a large squirrel, and remains quite sleeping most of the day, becoming very active toward evening and during the night. Much resembling the monkey in form of body there is still a marked similarity to our flying squirrel in shape of head and texture of coat. It is carnivorous and possesses canine teeth, and is very difficult to keep in confinement. Anxious to know how the animal was fed I asked Rolling, the keeper, the question, and he said that it was given a variety of food, sweet potatoes, bananas, and now and then an insect.

I noticed in the monkey house in a separate cage a beautiful specimen of the moon-eyed monkey, one of a genus of nocturnal monkeys found in the Brazilian forests. It resembles the lemurs, and is similar in habits as is usual with

night feeding animals, and both the specimens I mention have large eyes.

Philadelphians who take an interest in zoological matters are pleased with the prospect of the successful rearing of the young orang-outang at the zoo. This will be the second winter it has passed in this country, and it appears to be in the best of health, great care being taken to keep the apartment where it is confined at the proper temperature. Last summer it had at times the full range of the garden, and amazed the visitors by the rapid manner in which it made its way from limb to limb of the forest trees in the inclosure, swinging itself from branch to branch so quickly that it required some effort to keep up with it. The orang-outang is now about four years old.

The two chimpanzees purchased by the Philadelphia Zoological Society are dead, having succumbed to the change of climate they underwent in being brought to this country. They had furnished great amusement for nineteen months, which is, I believe, the longest time a chimpanzee has been kept in the United States.

During the present month the specimen of female gorilla—adult size—which was sent to Dr. Morton, of Philadelphia, in a barrel of rum from Africa will be dissected in the presence of a number of scientists. It is the intention of the missionary who shipped this specimen to Dr. Morton to forward on his arrival at his country in Africa, which is in the heart of the gorilla country, a full grown male in good condition. Decomposition having taken place before the female referred to was put in spirits, caused the falling out of almost the entire coat of hair, a small patch on the breast being all that remains.

A few days since a hawk was observed sailing in circles over the centre of our city, and finally to swoop down and dexterously pick a pigeon from a flock that were resting on a house-top. This is an illustration of what a hungry bird will do when forced by stress of weather and dearth of ordinary provender. Snow falls still continue, and last night rain, which has caused a crust to form on top of the snow, rendering it more difficult for the quail to glean a scanty livelihood. Homo.

THE MOUNTAIN QUAIL.

BETHLEHEM, Pa.

YOUR correspondent, S. H. C., of St. Joe, Mich., wants to know "all about the California quail—both kinds." To use his own expression I "have been there." They would do well "to divide the burden of 'carrying off shot' with their cousin Bob White." Both kinds afford good sport; but the "California" is a more difficult quarry. I never was able to discover much difference between the flavor of Bob White and the quail of California. I am aware, though, that some, whose judgment is perhaps better than my own, say that the flavor of the California bird is inferior. But if these birds could be raised here I think that most sportsmen would find great pleasure in hunting them, and would find little fault with them upon the score of flavor.

But the winter, "here's the rub." The mountain quail might, and probably would, survive moderate winters, his haunts being the mountains at an elevation of about ten thousand feet. In such localities there is snow in California, and of course severe cold too at times. But the fact that his home is in the mountains and at such an elevation introduces I think an element of difficulty into his introduction into the Eastern States. Would he be content with the lesser altitude in which he must live if he is to be of any use to the Eastern sportsman? Might he not be disposed to leave the rolling lands of the Eastern and the prairies of the Western States and take up his abode in the highest parts of our mountain ranges? If so he would be of of little use to the sportsman, and would probably be killed by the rigors of the winter. And yet spite of all these difficulties I should certainly advise that the experiment be made. It would cost but little either in money or trouble for some sportsman's association or game protective society to import and set free a number of them and observe the results. If their Western habitat is any indication as to where the experiment should be made here, there can be no doubt that it should be done in the near vicinity to mountains. By all means let the matter be tried. I should have great hope of its success.

As to the valley quail I think nothing could be done with it in any of our Northern States. Its habitat on the Pacific slope is the valleys. It is true it is sometimes found at an elevation of two thousand feet, but I think this is always in the warm weather. I am not aware that it is ever found out of the valleys when snow falls on the mountains. I am quite certain that the snow would be of our long, hard Eastern winters would kill every valley quail brought here. I feel especially sorry for this for I am indebted to them for many an hour's rare sport in their native haunts, and I would find great pleasure in renewing my acquaintance with them in my native haunts. They are beautiful, bright, cunning little fellows, who by their tricks and habits would give a deal of enjoyment to sportsmen who enjoy a new experience.

Should any one attempt the introduction of the mountain quail I would advise that it would be done in the early summer. C. B.

WATER BUG.—I am sending you by this day's mail an animal I call a water beetle, for want of the true name. It was handed me by a lad of more than usual intelligence who says he saw it catch young trout two inches long, and carry them into his hole. The boy dug it out, fish and all. The boy tells me he has seen others like it, but of dull brick color. He says also that he has seen (and will bring me one) a bug much smaller, with four legs and a pair of stout arms, that catches little fish like fun. Will *FOREST AND STREAM* please tell us the name of the one forwarded? And have they any kind of remedy to offer for their habits? B.

December 23, 1890.

The bug has been received. It belongs to the genus *Belostomatidae*, and is very destructive to young fish. It is found everywhere throughout the country in more or less abundance. The specimen sent belongs to a different species from our Eastern *Belostomatidae*. See *FOREST AND STREAM*, Vol. XII, pp. 125 and 205.

BLACK AND GRAY SQUIRRELS.—Denver, Colorado, Jan. 9.—*Editor Forest and Stream*: There are two or three questions before the *FOREST AND STREAM* debating club upon which I feel compelled to offer my remarks.

My youthful days were spent in the Buckeye State and upon a farm. Squirrels were a great pest in the corn-planting season and plentiful at all times to afford the best field sport we had. Seemingly every hollow tree in the woods sheltered

a family of young squirrels in the proper season, and that family was popularly believed to consist of from three to five gray ones and one black one. I do not know that this was the universal rule, although so recognized, but I do know that such was a very common fact, my knowledge being gained by watching the daily gambols of families of young squirrels whose houses were in sight of my father's door. Such were frequently caught for pets, several gray and one black being taken from the same nest. Except in color they were apparently the same in size, weight and action. Adult squirrels in the woods were in the proportion of one black to four or five gray.

A PALE DOVE.—A correspondent, I. H. J., of Macon, Ga., sends us a specimen for identification. He says: "I send you by mail the skin of a dove killed fifteen miles from this city, a *rara avis* for our section. I had made an effort to mount it, but secured it too late to preserve it. There was another bird killed near here almost entirely white, except a little portion of the wings, which was of the natural dove color. Will you please inform me as to their identity?"

The skin is that of a turtle dove (*Zenaidura macroura*). It is, however, very pale in color, being of a delicate light brown, paler toward the extremity of tail and wings—in a bleached specimen, which might be called a partial albino.

WINTER BIRDS—Niagara, Jan. 7, 1881.—Day before yesterday I saw the first robin of the season. The poor little fellow is very early or very late. I saw him in the churchyard among the pine trees. About a mile from here on a friend's farm there has been a meadow lark for the last two weeks. Just before Christmas a young friend told me he saw three cow birds. The coldest weather we have here was eight below zero.

NIAGARA.

WEIGHT OF BLACK-TAILED (MULE) DEER.—Toward the close of a favorable season, in August to October, when deer are at their best and the fat on a buck's rump is from an inch to an inch and a half thick, it is not rare to find them weighing, gross, from 250 to 300 pounds. An occasional one may pull down a few more pounds than the highest figure named, but, I think, never more than 335. They are not so large in New Mexico as further North. (By the way, I do not like the name "mule deer.")

B.

EARLY ? KINGFISHER—Hornellville, N. Y., Jan. 10, 1881.—I saw yesterday p. m., January 9, a kingfisher (*Ceryle alcyon*). This is the latest or the earliest I have observed them in this county. There is no open water on the river except where the current is very swift. I should think fishing with the temperature ten and twenty degrees below zero would be rather discouraging.

J. OTIS FELLOWS.

Fish Culture.

THE CENTRAL FISHCULTURAL SOCIETY.

[CONTINUED.]

MR SHAW.—"This writer who, judging from his argument, is a mill owner, states the whole case for the opponents of fishways and gives in full what he thinks to be the grievances to which dam owners are subjected by the fishway law, and being a good argument from his point of view, it deserves a careful and a candid consideration from the public.

He says first: "I am a citizen of the United States and desirous of showing willing obedience to the laws thereof. I derived my title from the United States Government, clear of any and all encumbrance, without any reservation of erecting or upholding fishways for the benefit of other parties," and claims protection from any law that will hamper, endanger or depreciate the value of his property, without payment in full for all damages sustained.

To his argument I made the following reply:

"The writer overlooks the fact that he is but one of several hundred that have obtained titles exactly alike from the General Government to the banks of the Wapishicon River, and that by making the river impassable for fish he has been depreciating the value of their property, thereby doing individually to all those parties just what he now complains the State should not do to him.

We hold these principles to be well settled by usages and decisions so many that, we find it impossible in a short article to quote but a very few of them.

1. In any grant from the public to individuals, any privilege which is not expressly granted is withheld.
2. A river is a public way.
3. The right to the water and fish in a stream is a joint one to all the owners, and must be so used by each as not to unreasonably interfere with the rights of others.
4. The passage of fish in a river is a public right.

The Legislature has the right to make such laws as will protect the public from injury by an improper use of any of these public rights.

To partially prove the correctness of these positions we will submit a few decisions.

"Every owner of a dam holds it on condition or limitation that a sufficient and reasonable passage way shall be allowed for fish. This limitation, being for the benefit of the public, is not extinguished by any inattention or neglect in compelling the owner to comply with it." (Stoughton v. Baker, 43 Mass. 525.)

In that case there was neglect to build a fishway from 1634 to 1789; but it was held that the duty continued.

"The preservation of fisheries is for the benefit of the public. The right to have the fish pass up the river is a public right. The right to catch the fish is in the owners of the soil; but the right to have the fish there, so that they can be caught, is a public right." (Commonwealth v. Essex Co., 13 Gray, 247.)

"The grant of privileges and exemptions to a corporation is strictly construed against the corporation, and in favor of the public. Nothing passes but what is granted in clear and explicit terms." (Ohio Life Ins. Co. v. Debolt, 16 Howard, 435.)

"Ownership of the banks and bed of a stream gives to the proprietor the exclusive right of fishery opposite his land, as well as the right to use the water to create power to operate mills; but neither the one nor the other, nor both combined, confer any right to erect obstructions in a stream to prevent the free passage of fish up and down the river at their accus-

tomized seasons, as such obstructions would impair and ultimately destroy all such rights owned by other proprietors both above and below the obstruction on such stream.

"Such water-power is everywhere regarded as public right, and fisheries, even in waters not navigable, are so far public rights that the Legislature may ordain and establish regulations to prevent obstructions to the passage of fish, and to promote the usual and uninterrupted enjoyment of the right by riparian owners." (Commissioners v. Holyoke Water-Power Co., Supreme Court of United States, December Term, 1872.)

This Holyoke case is the most noted that has ever been determined in this country, and was especially favorable to the dam owners, as a moment's glance at what was claimed by the defendants will show.

It was claimed for them, as has been claimed by our correspondent, that they had a good title from the Government, and so were entitled to use their property as they saw fit.

It was claimed that they had used the water-power as they were using it, for a long period of time, and so had obtained the right to use it by statute of limitation.

It was claimed that they had expended \$2,000,000 in improving their power, and so it was against public policy to compel them to put in a fishway. Also, that they had paid owners of fishing or riparian rights above their dam \$20,000 for the right to fish—that fact should relieve them.

But more especially it was claimed that they had a special charter permitting them to build just such a dam as they had built from the State Legislature.

We have not time or space to go over this case, but will simply say that all that was claimed for the defense was proved or admitted; that it was argued by eminent counsel, both before the Supreme Court of Massachusetts and the Supreme Court of the United States; that on August 31, 1872, the Supreme Court of Massachusetts entered a decree against the defendants, compelling them to put in a fishway; that upon appeal to the Supreme Court of the United States the decree was affirmed at the December term, 1872, and that the owners were compelled to put in a fishway. We could cite dozens of decisions bearing up the question and in all our reading know of no one decision that has not borne in the same direction. So we consider the question virtually settled, so far as the courts are concerned.

The Judiciary Committee of the House and Senate of the Seventeenth General Assembly of Iowa, composed of the best of legal talent, so determined and reported, after a full investigation, when this law was before them for their action.

Outside of this question of law, there is one of right or "justice." Originally all the purchasers of property along a stream pay the same price for their lands. Fish were abundant along the streams and are the property of the joint owners. One man builds a dam, the effectually stops the passage of fish; but as they are plenty, no one objects. The mill power brings wealth to the owner, until the boasts of its value. The dam brings barrenness of fish to the stream, until the mill-owner, scorning the little that is left, says: "I would give considerable money if there were not a fish in our river."

Now those who have suffered these losses ask those who have assumed to own all there was of value along the river, and so doing nearly destroyed their neighbors' rights, to so use the privileges they are enjoying as to permit the fish to pass up the streams through the waste water that flows over their dam, in order not to entirely annihilate the fish—knowing full well that what they ask will only partially restore to them their rights, but being willing to suffer this much rather than to injure in the least the water-powers that furnish the motive power for an industry which is fully and justly appreciated.

The fair discussion of this question would occupy more space than we have at our command, but we think that what we have said covers the case fully, where the builders own the land wholly upon which their dams are built. But, it might be added, in meandered streams, like the Wapishicon, a portion of the land upon which the dams are built—that is, the bed of the stream—has never been bought or sold and belongs as justly to the poorest person in these United States as to the parties who assume to own the dams that are upon them; and there is no question as a matter of fact, but that an action for their entire removal could be sustained, if the proper courts if sufficient cause were shown for so doing.

What we have written is in the kindest of feeling toward mill-owners, but is what we believe to be the facts and the law in the case and what is being demanded by the masses of our people at the hands of owners of dams.

The Fish Commissioner claims to have made plans of fishways as far as he was able, but they shall not interfere with the water-powers (as they only use the waste water), and that, in his opinion, they will add strength to the dam, while they are as cheap as durability and efficiency will permit.

B. F. SHAW.

REPORT OF THE TEXAS COMMISSION.

THE first report of the Commissioner on Fisheries for the State of Texas is before us. This State is the youngest of all in the work of fish culture, its Commissioner, Mr. J. I. Dinkins, having been appointed in September, 1879, and being without a cent of either salary or appropriation to work with the naturally fishless waters of the State, and, therefore confines himself mainly to recommending means for the future. His case is the same as that of many other commissions; he has to educate the legislators up to the point of seeing that whatever brings in a ton of food to the people from sources hitherto unproductive enriches the State to that amount.

One would suppose that the successes of fish culture in other States would reach the ears of the Texas lawmakers, and that they would not require to have a Fish Commission rehearse the alphabet of this branch of political economy any more than they would need to be told of the benefits of agriculture, railroads or telegraphs.

The Commissioner calls their attention to the fact that Texas has a large population, and it is fair to presume that they eat, and that other States have invested largely in restocking their waters, and found it profitable. He cites extracts from Mr. West, Jr., of Jersey, formerly of the Michigan Fish Commission, Mr. J. G. Worth, of North Carolina, from the reports of the West Virginia, Maryland, Wisconsin, Ohio, South Carolina, Massachusetts and Minnesota Fish Commissions; quotes an article on the carp from the *American Agriculturist*, and publishes his correspondence with Professor Baird, from whom he received 150 German carp, which were distributed to persons in Texas in lots of ten each, concerning the growth of these he says: "These fish have done well in our waters and grow rapidly. When they were received they were only three or four inches long, and now they are by actual measurement twenty inches

long, and it is thought that they have already spawned, as the ponds and pools where they were placed are now full of young fry, unknown before the carp were placed in them." He also mentions that "the United States Commission, through Prof. Baird, and without any expense to the State whatever, deposited in Texas streams, up to July 4, 1875, 425,000 young shad and 194,000 young California salmon."

A calculation is made of the water surface of the lakes and rivers, which gives a total of 169 square miles, or 106,561 acres, which it is claimed would swell to 200,000 if the smaller ponds and lakes were added in. The list of Fish Commissioners of the different States is published and credited to FOREST AND STREAM, where the list is revised annually. After writing his report the Commissioner received 7,650 more carp from Prof. Baird through Mr. Ellis, which will be distributed, but there are no funds to accomplish more this season.

SENDING YOUNG EGGS PERFECTLY DRY.

IT is known that fish eggs die quickly in water which is not in circulation, but that they will live several days out of it, and here is the advantage of the so-called dry impregnation. It is a simple matter to keep the eggs dry, so that they do not bear transportation well, especially on long journeys. It occurred to me that dry impregnated eggs which had never been in water, and in consequence had their development retarded by remaining dry, might be better adapted to long journeys than when placed in water before their voyage.

I prove this I had Messrs. Fr. Glaser & Son, of Basle, Switzerland, send me some salmon eggs and mill, tied up in the bladder of a hog, without a drop of water.

Twice this was done, and each time they were accompanied by a lot of eggs packed in the usual manner. The journey lasted three days and the temperature was high; but on both occasions the dry packed eggs came through in good condition, looking beautiful and red, while the others, packed in the usual manner, were all dead. I will experiment to find out if eggs with the embryo far advanced are also better if sent in the bladder of an animal than if packed in the usual manner.

Bernechen, Germany.

THE CONICAL SYSTEM OF HATCHING.—The *Fischerei Zeitung*, of Stettin, Germany, thus notices our Fishery editor: "Mr. Fred. Mather, who has since the Berlin Exposition drawn much nearer the German pisciculturists, is again in New York. He is now in charge of the fishery department of FOREST AND STREAM, the great American journal of field sports and fish culture. We take this opportunity to mention a matter in which Mr. Mather deserves honorable mention. The conical system of hatching is of his invention, but has been called the 'Wilmot hatching' in Germany. Mr. Wilmot patented it in America, July 18, 1876, and it is No. 180,085, while from a report of Prof. Baird for the year 1876 we learn that Mr. Mather made and used the cones in experiments in 1875. It is not necessary to enter into details of this matter, but if necessary it can be done."

WHERE AND WHEN DO BLUEFISH SPAWN?—Concerning the spawning of the "bluefish," or "tailor" (*Pomatomus saltatrix*), there seems to be some confusion of dates, and in this connection we are allowed to publish the following:

UNITED STATES COMMISSION, FISH AND FISHERIES, Washington, D. C., Dec. 29.—DEAR MR. BLACKFORD: Mr. Earle, in his interviews with the fishermen along the Jersey coast, was informed that when bluefish first come in many of them are full of ripe spawn, and the ripe spawn constitutes an article of sale in the market. Is this in accordance with your own experience, and do your men ever remember to have found ripe ovaries when cleaning bluefish at any season of the year, especially in spring? If your recollections are not clear on this subject, will you not make a note in some of your books, or paste a memorandum in your office to look into the matter when the time comes? It will be a very interesting problem. Yours truly, SPOKESMAN B. E. COMMISSIONER.

To E. G. Blackford, Esq., 80 Fulton Market, New York.

Mr. Blackford informs us that the spawn is not sold in market, but that young bluefish are often found among whitebait, in May and June. We have found the young of an inch or two inches, from May to August, and large ovaries (unripe) in July. Correspondence on this subject is in order.

A PRIZE FOR FISHCULTURISTS.—We find the following in a late number of the *Fischerei Zeitung* of Stettin, Germany, which we translate as follows: Berlin, December 5.—The committee of the German Fish Society has determined to offer a premium of 500 marks (1 M. = 23 2/3 cents) for the best work on the following subject: Of these fish, eggs which are used in hatching, especially the eggs of the salmon, the fungus well known to the pisciculturists as "Byssus," or formations of mold, which partly belong to the Saprolegniaceae, partly to the Schizomycetes, destroy a significant percentage. An exact botanical description of the species and kinds of these fungi, their biology and propagations, the manner of their introduction into the fish-breeding apparatus, the conditions which favor or impede their development, as also a description of how they injure the eggs, is desired. To this should be added a discussion on the question whether and by what means it might be possible to prevent their appearance among the eggs, and if once introduced into the breed, what is best to be done to prevent the further spreading of the evil. The competition for the premium is to be international; the said work to be sent sealed and provided with motto, or heading, to the Bureau of the German Fish Society, Leipzig Platz, No. 9, until October 1, 1882.

LIME FOR POND.—Bernuchen, Germany.—For several years I have used a large spring reservoir of about 3-16 ha (hectare) to raise a brood of trout in one summer. The pond contained many little stickle-backs, and in consequence thereof the losses on trout were very noticeable in the course of the summer, reaching as high as eighty per cent, and therefore, in the fall of 1878, I put in a spring lime, which was used in the pond after having let the water down off, so much thinly slackened lime that all the stickle-backs were killed. The success was surprising. In the spring of the

present year I placed 1,500 California salmon in the pond and at the fishing in the fall I caught 1,462 live salmon; more than twenty (I am sorry that I did not count them) had perished while fishing. The loss in the course of the summer, therefore, was very insignificant. In the fall, after fishing, I poured into the channels of all my ponds lime-milk (that is, lime thinned with so much water that it resembles milk) to kill stickle-backs, beetles and other unwelcome guests. The lime is of no further effect when the pond is refilled, and it can at once be occupied by fish.

M. VON DEM BORNE.

CONNECTICUT DOES NOT CONTRIBUTE.—The Springfield (Mass.) *Republican* says: "The intelligent Fish Committee of the last Connecticut Legislature advised against joining with the Commissioners of the United States, Massachusetts and Maine in stocking the rivers of the State with salmon. United States Commissioner Professor Baird, however, unwilling to see the work interrupted, has given the Connecticut Commissioners 240,000 ova of Penobscot salmon. They will be distributed from the Penobscot hatching house. The Legislature should be blamed into continuing the work next year."

BLACK BASS FOR ILLINOIS.—The Fish Commissioners of Illinois have thirty thousand young black bass (sp.?) from four to eight inches in length, for free distribution within the State, now in ponds near Quincy, in charge of Commissioner S. P. Bartlett.

Sea and River Fishing.

THE MORTALITY OF THE GULF FISHES.

NOTWITHSTANDING the many notices of the wholesale deaths among the fishes of the Gulf of Mexico and the manner in which their carcasses have polluted the air, until fears have been entertained of diseases being engendered among the inhabitants near the shore, people at a distance do not seem to realize the extent of the loss to the fishermen whose occupation is gone, nor the misery which may result from the continuation of this plague.

We have received a letter from Professor Baird on this subject, in which he incloses a letter from one of his correspondents, which we publish below:

UNITED STATES COMMISSIONER, FISH AND FISHERIES,
WASHINGTON, D. C., Jan. 7.

Editor Forest and Stream:

In the year 1878 the pages of *FOREST AND STREAM*, as also the proceedings of the National Museum, contained notices of a remarkable mortality among the fishes and marine animals of the Gulf of Mexico, the quantity of fish perishing being something truly enormous. This year the same phenomenon is repeated and the Florida papers contain many notices on the subject.

It is considered a matter of so much importance that the National Board of Health has detailed Doctor Ginter to visit the region and make a thorough investigation in regard to it.

Among the various communications that have reached the Smithsonian Institution I inclose one of the most detailed, from an extremely intelligent observer, a resident on the west coast of Florida. At present the cause of the evil is unknown, but a careful comparison of the data, supplemented by the special investigations of the Board of Health, may enable us to solve the problem. The occasion is a very serious one to the fishermen, and indeed to the people of the Gulf coast generally, as a vast amount of animal life, cast in a putrifying condition on the shores, must be a source of injury to the public health.

It is desirable that any observations of facts connected with this phenomenon should be published.

SPENCER F. BAIRD, Commissioner.

INDIAN ROCK, Fla., Dec. 21.

PROFESSOR BAIRD:

Knowing your interest in everything connected with fish, etc., I take the liberty of giving you all the facts I have been able to collect in reference to the late mortality among the fishes in Tampa Bay and adjoining coasts. Had I known before I began my cruise of the extent of this mortality and splendid opportunities afforded of collecting specimens of strange and perhaps unknown species, I might have gone better prepared for collecting specimens, but I had only heard a few vague rumors, and I was little prepared for anything further than a collection of facts in regard to the matter.

On leaving Clear Water, November 20, I sailed south through Boca Ciega Bay, and encountered the first dead fish floating on the water near Bri Key, a little southeast of Pass a Pile. These were mullet, and as we progressed to the south and east I began to encounter toothfish, eels, puffers and cowfish in immense numbers, and on attempting to land on the extreme point of Pt. Pinellas for the night I was driven to my boat by the stench of thousands of rotting fish upon the beach. The next morning I went ashore and found the dead fish drifted ashore in countless numbers. The eels appeared most numerous, followed by pufferfish, cowfish, sailor's choice, and small fish of every shape and variety. After these followed groupers, mangrove-snappers, jewfish, garpike, spade fish, sturgeons, and sharks. Other varieties unknown to me were mixed among these, together with vast numbers of cat-fish. I saw very few mullet there.

At Gadsden Point about the same varieties appeared, while at Tampa I saw but few dead fish, and they were principally gars and catfish. From Tampa I proceeded to the mouth of the Little Manatee to obtain some information from Mrs. Hoy concerning her theory accounting for the death of the fishes. I subsequently visited the towns of Manatee, Palmetto, Bradenton, and proceeded thence to Hunter's Point in Sarasota Pass, Longboat Inlet being the furthest point south visited. Returning I spent several days on Anna Maria Key, where I collected the skulls of several varieties of fish; thence, passing northward by way of Passage Key, Egmont, Mullet Key, and so on back to Clear Water. From Longboat Inlet round to Mullet Key the dead fish were principally mullet, catfish, eels and groupers. The mullet preponderating at least ten to one. Pufferfish, toothfish, cowfish and frog fish were extremely plentiful, indeed I saw no distinction in their numbers, though the number of dead mullet had increased very greatly.

I saw many fish in every stage of sickness from the first attack to the end. All were affected in nearly the same manner. The fish, apparently active and healthy, would be swimming along, and suddenly it would turn on its side and shoot to the top of the water, gasping as though out of the water, apparently unable to control its motions, often lying on its side on the bottom for five or ten minutes motionless, then suddenly shooting hither and thither without aim or object, and finally ending the struggle on the surface and floating off dead. Whole schools of mullet would suddenly stand upright on their tails spouting water, and die in five minutes. Gars would run for a long time with their snouts above the water and then lie motionless, as if dead, for ten or fifteen minutes. These generally lived an hour or more after being attacked. I obtained specimens of water from various localities, which I send herewith, marked to show whence obtained.

Before giving the statement of others in regard to the matter, I will give you briefly the results of my own observation in a very brief manner:

1. That dead fish were most numerous on the outside beaches, and on the inside beaches of the outer line of keys.

2. That dead fish were least numerous about the mouths of the creeks and rivers, decreasing gradually as one approached such places.

3. That the poisoned water was not diffused generally, but ran in streams of various sizes, as proven by fish dying in vast numbers instantly upon reaching such localities.

4. That the fish were killed by a specific poison, as proven by the sickness and death of birds which ate of the dead fish.

5. The fish began dying on the outside beaches first, as Mr. Strand, assistant light-keeper, at Egmont, reports, them coming up first on the 17th of October, while Mrs. Hoy observed them first on the first or second of November at Little Manatee River.

6. The examination of many hundred recently dead fish revealed no signs of disease. The colors were bright, the flesh firm and the gills rosy. The stomach and intestines appeared healthy.

In my haste I have neglected to state that I saw a good many dead birds during the trip. At Tampa ducks were dying. I saw dead vultures at Anna Maria Key, and at Passage Key large flocks of cormorants were sick and dying. I also saw the carcasses of terns, gulls and frigate birds. The cormorants sat on the beach with their heads under their wings and could be approached and handled.

It might be also proper to state that on Monday morning, December 14, about one hour before day, I heard a roaring sound from Passage Key, apparently far out at sea, resembling the "blowing off" of a steam boiler. The noise continued some ten minutes and ceased. After daylight I heard a similar roaring, which lasted about five minutes. There was no steamer in sight in the direction of the sound, and I observed no swell in the sea following it. After I got under sail I heard the noise a third time. Whether this was followed by the death of fish I am unable to say, as I did not stay to see. I mention this incidentally as a corroboration of Mrs. Hoy's statement, which is hereto appended. Whether, however, either of these disturbances of the water had any connection with the mortality among the fishes, the theory of sub-aqueous eruptions of poisonous gases is extremely plausible and reasonable.

S. T. WALKER.

Statement of Mr. Williams, of Pt. Pinellas:

The fish began dying about the last of October here. All kinds die except red fish. Eels and sea-toads are most numerous, though all kinds die. I have seen only a few sheeps-heads. I think it is caused by a black scum on the water resembling soot. When a school of mullet get into water colored by this black scum they die at once. Oysters are affected by this also, and those who eat of them are made very sick.

Statement of Mr. Spencer, of the Tampa Tribune:

I went out last Sunday (November 28) expressly to see for myself, and, if possible, to account for the dying of the fishes in Tampa Bay. I feel certain from what I saw that it is caused by fresh water from the creeks, rivers and marshes. The water where the fish are dying looks black and slimy—very different from the usual color of the bay water. You see there has been an unusual amount of rain this fall, and this becoming impregnated with the poison of decaying vegetation, is poured into the bay in unusual quantities and poisons the fish. This is my opinion, and I give it for what it is worth. The oyster saloons here were obliged to close, as the oysters came near killing several people.

Statement of Mrs. Charles Hoy, of Little Manatee:

The fish began dying here about the first of November. About 8 o'clock on the morning of the 28th, or thereabout, I was sitting on my front gallery, the air being perfectly still and the bay calm, when I heard a heavy spilling of the water in the direction of Gadsden Pt. This continued for a few minutes and was immediately followed by a roaring sound, such as might be made by the wheels of a side-wheel steamer near at hand, though the noise seemed to be several miles away. This continued for about a quarter of an hour, as near as I could guess, when it suddenly ceased. Some twenty-five or thirty minutes afterwards heavy swells began to come up the river, such as come in during a heavy blow from the northwest. These continued for a long time, gradually becoming lighter until I went to bed. In three days the fish began to come up the river dead and dying. I caught several mullet that were standing upright in the water sick, and each had three black spots on the back, which gradually faded away. I opened the fish and could see nothing the matter with them. The flesh was natural and firm and the gills were normal.

In regard to oysters I have had a rather rough experience, and can with certainty say that they are poisonous. A few days after the fish began dying I had a quart of fine oysters for dinner. I had a lady visitor on that day, but she did not like oysters and ate none. My daughter and I ate heartily of them and after dinner I took my gun and went out to a pond to shoot some ducks. I took a colored woman (my cook) along, and before I had gotten half way I began to feel weak and a mist came over my eyes. I kept on, however, and when I reached it was so blind I could not see the ducks, although the water was covered with them. With the assistance of the colored woman I got home, when I found my daughter similarly affected and unable to walk. Neither Mrs. Simms, the visitor, nor my cook were affected, which makes me know it was the oysters. The sickness and loss of vision gradually left us after drinking a cup of strong coffee. I am confident the death of the fish is caused by the discharge of poisonous gases from the bottom of the sea.

Statement of Messrs. Fogarty and Whittaker, snackmen, of Bradenton:

We own a snack and fish off the coast from Egmont south to Charlotte Harbor. Our business is about ruined by the death of the fish. They are dying off the coast as bad as inshore. Our fish die after we put them in the well, frequently in five minutes. We cannot say what causes it, as we have no means of ascertaining. The poisoned water runs in streaks, for often when three or four snacks are in company one or two will lose all their fish in a few minutes, while the others, a short distance off, lose none. In one instance, three being in company, two lost all their fish, while one lost none, the vessels being only a few hundred yards apart.

Statement of R. B. Strand, assistant-keeper of Egmont Light:

The fish first came up dead on the 17th of October, in the following order: eels, cowfish, toothfish, small fish, such as sailor's choice, minnows, etc., terrapins, ducks and other sea birds. The water has the appearance of being very stinky.

Incident related by Mr. Hendricks, postmaster at Palmetto: Mr. Dolly threw a cast net into a school of mullet, which appeared active and healthy. Before he landed them they were all dead in his net, and looking back the whole school was floating dead on the surface.

ORVIS knows how to fashion a rod and tie a fly. He is facile and deft. The fish favor his flies and anglers praise his rods, and between the two creel is well filled.

Game Bag and Gun.

"THE REFRIGERATOR AMENDMENT."

WHAT IT MEANS AND HOW IT IS REGARDED.

NEW YORK, January 14.

Editor Forest and Stream:
THE marketmen of the city are making another attempt to emulcinate the game laws, an attempt which they have made on every possible occasion for years past. The plea for this is inconspicuous, and to persons, even sportsmen, who are not aware of their "tricks and their maneuvers," is deceitful and alluring. They tell us amiably that great improvements have been brought about in refrigerators, so that they can keep birds and fish and meat an entire year without injury; and ask, with a simple and honest expression, why should they not be allowed to sell at all times what they can keep so nicely? Of course they add virtuously that they would never, no never, sell or buy, or hold or touch any game killed out of season, or out of their hands. At least some of our game dealers say this, especially those who have been sued, year after year, by the Association for the Protection of Game for selling game at prohibited times.

There are as good men in our markets as out of them, who do not commit frauds themselves and do not wish others to do so, but who must have game on their stands if their neighbors do; and these men wish their business protected on the same ground that we wish our sport protected—that both may last longer than our day and generation. It is fair to say such men would allow a law which it gave them large license, but usually it is not safe to make a person judge of the law in his own case; and to trust a man to sell game during the close season, leaving it to his honor to make sure that only game killed at proper times be sold, is surely giving the largest license.

There is nothing new in this demand of the marketmen, if I may call it so, although it really comes from but a small portion. A similar provision once existed in the law, and placed there few convictions for selling game out of season. One invoice will cover any number of birds or fish or deer; there is no earmark by which one quail can be distinguished from another, nor can it be proved whether one woodcock came from Maine or Florida. The reply to all suits was that the game was purchased within the allowable period, and there was the invoice, a perennal argis, so to speak, behind which no investigation could possibly go. Now we sportsmen may be fairly able to discriminate between the heavy and light quality of their conviction; do not make the law violator in their favor; do not let all the dogs loose and let all the bricks fall. If any such amendments as those proposed are passed there will be no more convictions for infractions of the laws, and we may as well go in and have a good time while it lasts.

If game is to be sold all the year through, it may as well be killed all the year through and the game laws abolished. The pot hunters have a big enough pull on the sportsmen now in the difficulty and rarity of their conviction; do not make the law violator in their favor; do not let all the dogs loose and let all the bricks fall. If any such amendments as those proposed are passed there will be no more convictions for infractions of the laws, and we may as well go in and have a good time while it lasts.

As to the pretense that there is more game killed in the open season than can be sold, it is no more than a pretense. Of course the game killed toward the end of the open time cannot be sent to distant markets, but that result is a necessary result of any law and would equally exist under the refrigerator provisions if those provisions were to be honestly obeyed, that is if no game whatever was to be purchased after the commencement of the close time, and only that sold which was actually refrigerated before. Apart from this, there is market for all game that is legitimately killed and more than for all that should be. People forget that game cannot be cultivated like tame animals, that we cannot raise pineapples and guinea fow, or other exterminated, as our Long Island and Nantucket Phalaris testify; that we cannot raise quail as we raise chickens, nor ruffed grouse like ducks, nor deer like sheep, but that the supply is limited by nature, and if exceeded by man's destruction will end in certain annihilation. If the marketmen's statement were true, we ought simply to reduce the time for killing, as game is disappearing rapidly enough already. The proper law would be to forbid the sale of any game after the first day of the close time. There is no difficulty in this. Why should it not be so here? The only exception to this might be made in the case of venison, which only exists in our State in a few localities and could therefore be protected by local laws, with the consent and co-operation of the residents, and which, when it comes from the far West, the principal source of market supply, only reaches New York city in prime condition in the latter part of December or fore part of January. I write this hastily, that I may reach you in time and under the hope that you will take prompt notice of this insidious attempt to destroy

the protective work so long carried on by our best and most self-denying sportsmen.

ROBERT B. ROOSEVELT.

NEW YORK, Jan. 12.

Originally the means of taking game permitted only a moderate amount to be captured, sufficient for the use of the captors for a few days only. Since then fixed ammunition and percussion caps and breech-loaders have been invented, increasing the capacity of destruction a hundred fold. Furthermore, the whole of the United States has become wholly or partially cultivated, and game has no longer its fastnesses. Then American ingenuity invented nets by which all the quail in a county can be trapped within a month, and all the fish in a river can be captured during a season.

The wealth of a prairie is the grouse; the value of a stream is its fish; the charm of field and water is the regular enjoyment year by year and generation by generation of the fish and the moorland and river. It is that which gives manhood to the growing boy and youth to old age, and makes the autumn of the year vocal with the cry of familiar birds.

To preserve this continuity of pleasure to our children we have enacted laws limiting the killing of most kinds of game to four months in the latter part of the year.

Now comes the plea of the trapper and the trader, asking that they may capture all the game they can from your fields and your streams by any known invention and sell them during all the year, relieving only their consciences. Putting aside all the loss of the curd that is frozen out of the fish and all the juice that is dried up in the birds, the question of right to be decided is whether men who do not own either the land or water, and who in most instances are vagrants from a distance shall be authorized to capture all this game and ship it to distant cities and there sell it all the year round for what price soever it may bring, and failing to sell it there to ship it to other States or foreign countries.

We may admit that trapper and trader would each make large gains which the law prevents, but we know that some one's fields and some one's streams are left uncultivated and diminished in beauty and pecuniary value in order that the trappers and traders can make this gain. If we desire that crops of conspicuous birds and fish and deer shall remain as part of the soil, as much a part of it as the annual flowers and the music of the waters, we must see to it that their use shall be thoughtful, moderate use of the intelligent man, and not the use of the trader that has annihilated the beaver and the buffalo.

CHAS. E. WHITEHEAD.

WISCONSIN SPORTSMEN'S ASSOCIATION.

THE second annual meeting of the Wisconsin Sportsman's Association was held at Milwaukee, January 10. The following members were present: R. M. Boyd, W. G. Barker, C. W. Smith, A. Pugh, Geo. Rickman and A. H. Amos, Gun Club of Racine; A. K. Delaney, Mayville; Sam. Fildes, Ashland; T. S. Powers, Tomah; H. W. Weischer, Madison, and S. C. Williams, Port Washington; Stewart Murray, E. J. Campbell, G. W. Robertson, M. P. Carpenter, O. W. Wight, Prof. G. W. Peckham, G. Preusser, B. Liedersdorf, C. Fernekes, Judge J. A. Mallory, J. M. Neil, T. S. Gray, C. Simmonds, J. G. Wells and W. E. Mann, of Milwaukee. New members elected were: F. E. Pond, of Westfield; John A. Dutcher, Louis Auer, August Lueneng and C. A. Hart, of Milwaukee.

President Fred. Rietbrock delivered the following address: "The Association is organized for the purpose of securing the enactment of judicious and effective laws for the protection of wild game of fur, fin and feather, and of insectivorous birds, and for the enforcement of all such laws. The organization was effected at so late a date in the session of the last Legislature that it was not deemed expedient to put forth any effort to influence the enactment of laws calculated to carry out the objects of the Association. But I think it was generally understood at our first meeting that our object was on laws should be their last consideration, the whole subject of game and fish laws, and a practicable mode of securing the enforcement thereof, and at the present session lay before you the results of their work. Two of such committees recently held a joint session, and will to-day make recommendations on various subjects which I hope will meet with your approval, and that you will take such steps as will prevail on the members of the Legislature to enact them into laws. In the southern portion of the State the quail and prairie chicken, which were once so numerous, are becoming very scarce; it would not be well to suspend the killing thereof altogether for two years, so as to allow the depleted stocks to become restocked.

"Snipe, woodcock and duck are migratory birds, but they find their natural breeding ground in our State. Should we not forego the pleasure of spring shooting altogether, so as not to kill or disturb any of those birds when they are pairing and making ready to hatch their broods? I suggest that it would be well to hunt at some early day, if possible, a meeting of sportsmen from the whole Northwest, to devise a uniform system of laws for the States of Indiana, Illinois, Wisconsin, Iowa and Minnesota, in so far as least as spring shooting is concerned. In wild game or fish there is no species of property; at least not until it has been reduced to possession; but the taking, disposition and use thereof is properly within the control of the State. Should the Legislature not be prevailed upon to enact against the poaching of every species of game and fish taken from the State? In the northern half of the State deer are still abundant, but are slain by the hundreds every fall for the hides and saddles alone; the export demand only making it profitable to slay them in such great numbers. Nor should the Indians, in my judgment, be exempt from the statutes enacted by white men. I am credibly informed that toward the northern border the Indians have fallen into the practice of building fences or traps, in miles in length, by which they are enabled to slay them in large numbers, and that they do this largely for their hides alone. It seems to me that the time has come when the Indians should in this State either follow the pursuits of civilized people to secure a livelihood or be kept on their reservations. During the last few years the State has done much by way of propagating fish and bringing to our waters species not indigenous here. Our State is remarkably well watered by creeks, rivers and lakes, and most of these are abundantly stocked with native fish as game and delicacies as any that can be planted in them. Many of these waters have, however, been very much depleted by net-fishing and by other unsportsmanlike practices, such as disturbing the spawn, spearing during the spawning season, and the angling thereof far beyond actual capacity to use them and only for the amusement the catching thereof may have afforded. Would it not be economy if the State were to expend \$100 for the protection of our native stock of fish against such ravages

for every \$1,000 that is expended in the propagation of species not natural to our own waters? Since the organization of this Association our Secretary has traveled to various parts of the State and been in correspondence with members of the Association and local clubs, and by his personal endeavors has awakened much interest in the object of our society. Indeed, from every portion of the State we have received encouragement in the good work that we have commenced. Let us then hope that the Legislature about to convene will give us an intelligent game code, one that will meet the approval of the mass of the people who interest themselves in the subject, and that the true sportsmen will so compromise their differences of opinions and wishes as to give them their united support."

The committee on game then read the following report: "How much soever we may wish it were otherwise, Wisconsin has not been exempt from the all-pervading destruction of game. In the southern portion of our State it is gone, except, perhaps, two or three species of game birds. From this section the deer, that noble monarch of our primeval forests, has long since disappeared from the presence of his deadliest foe, civilized man. Our four game birds, the prairie chicken and quail are well-nigh extinct. The ruffed grouse, that gamiest of all game birds, once so plentiful in our groves in this part of Wisconsin, now rarely startles us with noisy wing and impetuous flight from cover and darts from view, no sooner seen than lost from sight. Woodcock, if not diminishing in numbers, are barely holding their own. Snipe are unquestionably decreasing in numbers, owing chiefly to the destruction they encounter each spring during their migration northward. The prompt, decisive "quack" of the mallard and the wild, wild note of the woodcock are sounds which less and less frequently greet the ear as the seasons come and go. Thousands of lakes, streams, marshes and bays in Southern Wisconsin, which a few years ago teemed with them, are now tenantless the livelong year.

All these facts point to one unmistakable result. They mean extermination.

In view of these facts, the apathy, the rather want of interest in this subject which characterize a large majority of our people, may well be a subject of astonishment. This lack of interest on the part of our people generally has become so universally understood and recognized that every person who has given the subject the slightest consideration has reached the conclusion that the final hope for the preservation of game rests with the fraternity of sportsmen. If they do not take some action toward game protection and preservation and arrest the march of extermination, the future will be a repetition of the past. The golden autumn of the golden autumn of each year gladly snatch a few days from the active pursuits of life to indulge in the soul-stirring delights of field sport, will find the pursuit of their favorite recreation leading him in year by year toward the setting sun. It should be, then, not only the duty, but the pride, of every sportsman to assume the responsibility thus presented and meet the case with such remedies as its exigencies seem to require.

Two things are imperatively demanded: First, stringent laws for the protection of game; second, their relentless and stringent enforcement. Toward the accomplishment of these requisites sportsmen must take the initiative and persevere, and it is confidently believed that with the interest which is rapidly awakening upon this subject, Wisconsin will not be long without an efficient system of game laws which shall be rigorously enforced.

But too much in the way of good results must not be expected. Even after the realization of these two objects in this State it is a question whether many species of our game birds will not continue to diminish in numbers, even under these favorable conditions unless similar steps are taken for their protection in our neighboring States.

A large proportion of the migratory birds which are exposed for sale in the spring in the State are taken in other States and shipped here for a market. So long as the taking, killing and transporting is permitted in adjacent States, if our Legislature drives them from the market of this State they will doubtless find a market elsewhere. The true and complete remedy lies in securing protection for and prohibition of traffic in all our birds of migratory habits in all the States traversed by them during their spring flight. By energetic and considerate action it is confidently believed this can be accomplished. Your committee would therefore recommend that the association take such action as may seem best calculated to secure the co-operation of the sportsmen and sportsman's associations in our neighboring States, with a view to secure laws on the subject of game protection in their several States which shall be uniform, harmonious and co-operative and especially directed to the abolition of all spring shooting.

In regard to legislation in this State, your committee are of the opinion that all laws in relation to game should be codified and reduced to a form which should embrace substantially the following provisions:

PROPOSED LEGISLATION.

1. Shooting or taking, transporting, selling, offering for sale, having in possession, of all game animals, deer, hare, rabbits, gray, black or fox squirrels, and all game birds and wild fowl, prohibited except during a short open season, provided ten or fifteen days after close of open season allowed to dispose of game on land.
2. Prohibition of all taking by set-guns, traps, nets, snares, springs, and the use thereof for such purpose at any season of the year.
3. Exportation of all game out of the State prohibited.
4. Limitation of the number of animals or birds lawful to be taken in any one day by one person to be, deer, one; all other game twenty-five.
5. Shooting from punt or sneak boats, and the use of any battery, swivel or pivot gun, or any arm other than the common gun discharged from the shoulder prohibited.
6. No quail shooting for a term of three years.
7. Molesting or disturbing nests or eggs of all game birds and wild fowl prohibited.
8. Prohibition of shooting any bird, game or insectivorous bird from the trap.
9. Protection of minks, rats and fur-bearing animals, same as now provided by law.
10. Protection of the robin, martin, meadow-lark, and all insect-devouring birds, their nests, birds and young.
11. Persons violating laws to be subject to prosecution in any county within or through which game is unlawfully taken or held in possession.
12. All sheriffs and deputies, constables, city and village marshals and police force required to make complaint of any violations, and District Attorneys to attend and conduct trials.
13. Appointment of game and fish wardens by the Governor are recommendations of this Association and the Wis-

consin Fish Commission, whose duty it shall be to see that laws are executed, and make complaint of violations.

14. Penalties: Twenty-five dollars per head on deer; ten dollars on all other game animals; and fine from ten dollars to fifty dollars for other violations; one-half, in all cases, to go to the informer.

15. Game season. On deer from August 25 to Dec. 15; on all grouse, ducks and snipe from August 25 to December 15; woodcocks from July 10 to December 15; on hares, rabbits and animals from September 1 to February 1.

All of which is respectfully submitted.

A. K. DELANEY,
GUSTAVE PREUSSER,
O. B. THOMAS,
Committee.

By a suggestion of Judge Mallory an amendment was adopted making the infringement a misdemeanor.

An amendment was also adopted to the paragraph numbered "4," by which "deer" was stricken out altogether.

An amendment was also adopted to No. "6," classing prairie chicken with quail, so as not to be shot for three years.

Number "8" was stricken out.

An amendment to No. "11" made the penalty either fine or imprisonment.

It was also ordered to insert a clause prohibiting the catching of wild pigeons with nets.

Judge Mallory submitted the report of the committee on "Enforcement of Game, Fish and Trespass Laws" as follows:

TO THE WISCONSIN SPORTSMEN'S ASSOCIATION: The committee on enforcement of game, fish and trespass laws respectfully submit the following report:

In the opinion of your committee the first step to be taken for the enforcement of such laws is to appoint a committee for the purpose of raising a special fund to be used for paying expenses of prosecuting violations of such laws.

Your committee further recommend that this Association make an effort to secure the passage of a law by which the Governor shall be authorized to appoint game constables or fish wardens in such localities as they may be necessary, making it the duty of such officers to be watchful and diligent in their efforts to detect and bring to punishment all persons who may be committing violations of such laws; and requiring the prosecuting attorney of the county in which any violation of such laws is committed to prosecute cases against such offenders.

It is the further opinion of your committee that effort should be made to secure the organization of local societies in every county in the State when such a society may be needed, for the purpose of assisting in the enforcement of the game and fish laws.

Your committee do not make any recommendations as to trespass laws, but suggest that subject for such consideration as the Association may think proper to give it.

All of which is respectfully submitted.

J. A. MALLORY,
B. LIEBERSDORF,
Committee.

The election of officers resulted as follows:

President—Fred. Rietbrock, Milwaukee.
Secretary—O. W. Robertson, Milwaukee.
Treasurer—Stewart Murray, Milwaukee.
Vice Presidents—Chauncey Simonds, Milwaukee; R. M. Boyd, Racine; L. A. Winchester, Whitewater; R. H. Strong, Baraboo; C. E. Norbeck, La Crosse; A. K. Delaney, Mayville; Chas. Felker, Oshkosh; Wm. Merrill, Prairie du Chien; M. T. Bally, Madison; G. W. Corning, Portage; T. S. Powers, Tomah; J. G. Howell, Beaver Dam; H. F. Peck, East Troy; W. B. Van Brunt, Iron River; H. S. Fildes, Ashland; J. C. Neville, Green Bay; F. A. Turner, Stoughton; L. M. Wight, Fond du Lac; E. W. Jones, Wausau; John Laigh, Oconto; Peter Greeley, Mukwonago; M. J. Egan, Franklin, Mil. Co.; H. A. Taylor, Hudson; Jacob Kotter, Wausau; Lou Walker, Plainfield; J. H. Boyle, Winneconne; F. W. Sackett, Berlin.

The committee on game laws was instructed to codify the same, and to prepare them in proper shape for presentation to the Legislature. The next meeting of the Association was appointed for the third Tuesday during the Legislative session at Madison.

HIGHHOLDS, SQUIRRELS AND WOODCOCK.

FAST CRESTER, New York, Jan. 10.

Editor Forest and Stream:

I have been deeply interested reading the various contributions to FOREST AND STREAM on the proposed revision of the game laws, and believe some of the writers that enforcement of the laws is more needed than revision. But that some of the sections are defective my petty offices of constable and game constable for the last couple of years have made palpably plain to me. I have succeeded, however, sufficiently well to cause the violations upon the land to be very rare where they were once frequent, and have entirely stopped the drawing of seines in Hutchinson River, near Pelham Bridge. This I effected two years ago last June by arresting four parties whom I caught in the act. They got off lightly, but have never wet their seines in the river since. For this I received favorable mention in FOREST AND STREAM at the time and the thanks of the fishing fraternity generally. On different occasions since I have warned and driven off other parties without making an arrest; the laws in regard to salt water being somewhat vague and defective.

I would suggest that the rivers, salt water bays and estuaries emptying into Long Island Sound be distinctly stated, and if by lakes are allowed the same square size of the mesh to be plainly given, and that pounds be prohibited in Westchester County.

Section twelve should have the swallow mentioned as well as the martin, as some so-called sportsmen are apt to shoot swallows when assembled for glass ball and pigeon shooting. This section, as well as section thirteen, as amended in 1880, has no close making the killing of the birds mentioned a misdemeanor. Without this the summary arrest without warrant, provided for in section thirty-five, is useless, and as that is about the only way to bring non-resident offenders to justice, the killing of the birds should certainly be made a misdemeanor.

I see that Col. Pike in his address to the Long Island farmer proposes to abolish the shooting of meadow larks, highholds and "11" snipe, robins, under the head of some other name. Of course, they are all insectivorous birds, but so are the quail and ruffed grouse, and what these are to the wing-shot, the robin and highhold are to those who have never acquired the art of stopping the swift flying game bird on the

wing. And the meadow lark, with his even steady flight, is a good bird for the beginner to practice on and fit him for the killing of nobler game. I do not write this from interested motives, for ever since the time when as a mere lad, nearly twenty-five years ago, with a terrier dog and a twenty-horse single-barrel gun, I killed six woodcock one summer afternoon, I have disdained the lesser game. But I write in behalf of the hunter, confined in close, stultifying offices in the cities, can occasionally get a day off during the open season. Notice one of these coming in from his day's sport, with what pride he displays his string of highbills and robins and if, by some lucky chance he has managed to score two or three larks, then he is happy indeed. No big peckets for him to hide his game. Oh, no! He wants every one to see that he is a gunner and has them strung out to make as much show as possible. You ask him where he shot those highbills and he will tell you, and truthfully too, that two-thirds of them were found teeming upon the dogwood, peppercorn or ivy berries and frost grapes, and one-half the other third upon the dried top of some decayed tree. I do not dispute the fact that the highbill destroys insects, but it is no more to be compared as an insect destroyer with the small red-headed woodpecker than the imported sparrow should be compared to our native song sparrow. The robin is a great destroyer of grapes and other fruit. The meadow lark probably destroys more insects than either of the others, but does little or no mischief, but he is pretty well able to take care of himself, and is so shy that very few of them are killed by the tyros. Altogether I think that the loss caused by the killing of these three birds during the months of October, November and December is more than counterbalanced by the pleasure the hunting of them gives to the class of hunters above referred to, and to the small boys, who in hunting them acquire a love of field sports which is apt to last them through life; and the man who loves to shoot and is not a bad member of society. That these gunners sometimes kill the farmer's poultry is no doubt true, but I think they are killed fully as often by those who are professedly hunting higher game, and there are laws to punish these marauders whether of high or low degree.

I have written at some length upon this subject, believing that the protection of the game will be more generally accomplished by a liberal law than by a law by any special class.

In regard to the proposal to issue licences I do not believe that any body of men sent to Albany by the people of this State will ever seriously consider such a preposterous question. If they have the right to pass such a law for Long Island they have the right to pass it for the whole State. If they have the right to have a license fee of two dollars charged, they have the right to increase it to ten, twenty or fifty dollars, or more. It smacks a little too strongly of the English laws, where a man could be transported for killing a pheasant or hare, to even favor it in this country.

The proposed open season for squirrels is as much too late as the old one was too early; September 15 is late enough. The most of the squirrels are well grown at that time, though in isolated instances they have young very late, as on one occasion I killed a squirrel with milk in her teats in November. But most of them are bred very early in the summer, so before the snow has left the ground in the spring. Most of those who hunt them, at least in this vicinity, still hunt them in September and October. After that a dog is necessary and good squirrel dogs are very rare.

In regard to the proposed change in the open season for woodcock I should prefer to see it one month earlier than one month later. I have read most, if not all, the articles which have appeared in FOREST AND STREAM upon the subject and they have failed to convince me that woodcock are not better able to protect themselves in July than many quail are in November. The extent of the season is a few years about the time of the war, I have shot woodcock in the lower part of Westchester County for twenty-five years and tried to shoot them somewhat longer and in favorable seasons. Taking into consideration the immense increase in the number of gunners and the wholesale destruction of their favorite covers and breeding places, they are as plenty as ever. My idea is that sufficient birds are raised in inaccessible regions where they are never hunted, to keep up the supply; that the place where they stop to breed is entirely dependent upon climatic changes and not upon their fondness for any special locality, as with some other birds; that the birds which, if the spring opens early, would breed in the northern part of the State, will, many of them, remain here if the season is late. I have never but once in the number of years mentioned found birds unable to fly in July, and they were probably the offspring of a bird that had her first nest destroyed, as I do not believe they habitually breed twice in the same season.

In regard to the woodcock being an easy prey to the gunner during the summer I would say I have shot in company with many different men and have noticed that those who would kill three out of five birds, shooting at every one that rose in the summer were more rare than those who would kill four out of five in the fall.

One year ago last fall, from October 20 to November 23, shooting fourteen days alone, I killed ninety-three woodcock, and shooting in company with another party four days during the next week killed twenty-four. These birds were all killed within eight miles of the northern boundary of New York city, many of them within three miles and that after the ground had been repeatedly shot over during the summer, ten being the most killed in any one day. Last fall with very little summer shooting not more than one-half that number fell to my gun, nine, however, being killed on one occasion. The birds were quite plenty fifteen miles above here, Nelson Ferris and a party of hunters took sixteen and two or three grouse in one day near Port Chester. The weather changed suddenly very cold, freezing the ground, and most of the birds passed over here without stopping. In concluding I will only say that however much my views may differ from those of others I shall do all in my power to protect the game and uphold whatever laws may be passed. J. H. D.

A DAY'S DEER HUNTING IN CANADA.

"IT'S no use, sir," said McKinlay; "the deer will hear you a mile off this morning. And we might just as well be in the shanty as wandering about through these cursed briars and woods."

This remark was made to me by a backwoodsman whom I had hired to accompany me for a couple of days' still hunting.

The day was clear and pleasantly cold, without a breath of air stirring, so that every little noise re-echoed itself through the woods, making a man's progress even in moccasins far too noisy to enable him to follow a deer with any chance of getting a shot.

At least so thought McKinlay, but as my time was limited, I determined to go in spite of the unfavorable calmness of the weather. So telling McKinlay to strike off in an easterly direction, I entered the woods, and after going north for a short distance I turned my steps to the east, so as to travel parallel with my companion at a distance from him of about half a mile. In less than twenty minutes I came suddenly on three fresh tracks, evidently those of a rook-stalked deer, which had been feeding leisurely on a hill side, and to judge from the tracks the animals could not have gone far, and were most probably at that moment within hearing distance of me. For nearly an hour I followed the tracks, proceeding with great caution and peeping into every valley with the hope of seeing my three friends, as I now felt that they must be but a short distance ahead of me.

I saw the tracks running up a hill on the other side of which lay a ravine, and further on a second hill of greater size than the first appeared, and I said softly to myself they must either be in the ravine or on the hillside beyond.

Creeping stealthily up through underbrush and fallen trees I reached the top of the nearest hill, and here paused for a quiet survey of the country beyond. Not a living creature was to be seen in the rocky gully beneath me, but standing immediately in front of me, at a distance of perhaps ninety yards, was a fair-sized buck. Further to the right I could see the head and neck of a doe, but the third deer was not to be seen, although I knew the missing animal must be somewhere close at hand.

Both deer appeared to be looking straight at me, and I immediately fired at the buck. After the crack of my rifle I saw his legs waving a farewell to those he left behind him, and the next instant the doe was stooping over him, thus exposing nearly her whole side. Again my Spencer cracked, and I heard the dull "thud" of the bullet as it crashed into the side of the faithful animal. Never moving, she stood over her fallen lord, while once and again she calmly took my fire, and then, with three bullets through her body, she sank and lay down and died almost touching the dead buck.

Re-loading my rifle, I made two or three steps forward, when the third deer started from a small thicket close to the carcasses of the deer I had killed. Getting glimpses every now and then of the nimble-footed beast, I tried hard to obtain a sufficient view to enable me to shoot, and at last, as the deer bounded swiftly over a beaver meadow to my left, I fired almost a snap shot at a distance of upward of a hundred and fifty yards.

Simultaneously with the clear, pleasant ring of my rifle I saw that the ball had taken effect. A moment more showed me the deer disappear in some cedars, but going at a slackened pace and on three legs, a pretty sure evidence that my ball had done mischief. I hastily cut the throats of the two deer and whistled for McKinlay, who was not long in joining me. Leaving him to clean the deer, I took the track of the wounded animal and ran until I saw blood almost warm, where the poor brute had stood under the shelter of a tree-top. The tracks now showed me that the pace was no longer a run, and clots of blood marked every step.

The woods became more open and I hurried on until I reached a marsh, through which the track ran. This swamp was several hundred yards in length and as smooth as a table, being firmly frozen by continued severe frost. When half way across I found the track turn suddenly to the right, and as my eyes glanced in the new direction I saw the deer (a fine, fat doe) get up out of the crisp rushes and make a dash straight away from me on the level surface of the frozen marsh. She ran slowly and apparently with great effort, but was very nearly two hundred yards off before I fired, of course hurriedly, and missed.

Click! click! went the guard, and another cartridge slipped into the breech. Spang! said my good rifle once more, and to my joy I saw the doe pitch on her head and lie still.

On examining her I found that my first shot had shattered her left hind leg, and in half an hour I got away. I fancy the other hind leg must have been sprained, as she hardly ran a mile after the first ball struck her. My last bullet (it was rather a lucky shot) had caught her squarely in the centre of the neck, and I don't know any spot more fatal than the neck bone. I have shot plenty of deer in the water and have often remarked that if you place your ball properly in the deer's neck, just below the head, the animal dies almost without a struggle.

I was now quite satisfied with my morning's work, and after cleaning the doe I buried her under the snow, first fastening her fore legs to her nose by means of a piece of hard wood, a simple process which enables you to drag a deer through the woods with very little trouble.

Rejoining McKinlay, we managed, after three hours work, to get two of the deer out of the woods before dark. Bright and early the following morning we brought the other deer, now frozen stiff, to the Frontenac Road, and an hour afterwards I was en route to my home in the city of Kingston, a distance of forty miles from the scene of my still hunt.

Kingston, Dec. 14.

RIDEAU.

GAME IN NOVA SCOTIA.

NEW GLASGOW, N. S., December, 1890.

PERHAPS one of the readers of FOREST AND STREAM might like to know how their brothers of the rod and gun fare for sport in this land of the Mayflower.

First and foremost we have the king of the bog and barren, the lovely moose. Next to him the caribou, the black bear, and of late an occasional wolf. Of game birds we have the grouse and brant and an army of ducks, from the beautiful woodcock to the smallest teal, ruffed grouse, woodcock, snipe and plover.

Of late sportsmen and the public generally have been paying more attention to the game law, and although it is not yet all that a sportsman could desire, still a man has not now to travel the woods and barrens for a week before striking a fresh moose track.

In 1873 a law was passed prohibiting the killing of moose for three years, and since that time they have been on the increase. Previous to that year of extermination was carried on against them, and some idea can be formed of the number killed from the fact that a single firm in Pictou shipped in one season over seven hundred moose hides, the deer mostly killed in the counties of Pictou and Guysboro.

The writer knows an Indian who in one year killed one hundred moose, and I have while hunting in the Liscomb region a single day slain some upon the carcasses of twelve moose, killed alone for their skins, and the flesh left for the bears or for any one who cared to take the trouble to carry it out of the woods. Happily this state of things no longer exists. This is partly owing to increased vigilance on the part of the

game wardens, who are stimulated by receiving half the fine in case a conviction for a violation of the game law, and partly that the skins have fallen so low in market value that it hardly pays to hunt for them. No single hunter or party of hunters are allowed to kill more than three moose and five caribou in one season.

The practice of hunting with dogs is, I am glad to say, almost done away with, and the greatest evil which now remains is the abnormal practice of "snaring," which is practiced by many of the settlers in the outlying districts, the *modus operandi* of which I may give at some future time. We are in hopes that in a little time we will be able to crush out this evil, but I must admit it is a tedious operation. A man who hunts with dogs or hunts out of season generally leaves some trace, but one who sneaks out generally after night, sets his snares and quietly returns, and does not visit them again or go near the woods for some days, and then not until darkness covers his evil deeds, is a more difficult subject to deal with, and it is not until some hunter or lumberman comes by accident upon the "spring pole," and sees the work the poor brute has made while tangled, that it is known that a moose has fallen in the toils of some vile snarer. And this is generally all the evidence that is forthcoming, and I have no hesitation in saying that no more moose fall in this way than to the rifle of the hunters either by "calling" or "still hunting."

The best district for hunting in this part of the province is the Liscomb Lake region, which extends from Sheet Harbor to the West River of Pictou, a distance of over seventy miles, nearly all woods and barrens. I have no doubt that some of the readers of this will remember with pleasure days enjoyably spent hunting or fishing in this locality. In this region is the Big Barren, which extends nearly from Liscomb Harbor to Big Liscomb Lake, a distance of seventeen miles, and an average width of three miles. Unfortunately, indeed, is the hunter who, in crossing this waste does not come upon fresh "sign" of moose or caribou, if he does not see the animals themselves. This barren is covered in many places with blueberry bushes, and here when the berries are ripe bruno is also to be found. Of late caribou are becoming very numerous in this district; the writer saw a herd of over one hundred this fall. They appear to have been driven in from New Brunswick, and it is only within the last few years that this deer has appeared in any great numbers. The wolves also appear to have followed the caribou, for last season they were more plentiful than ever known before.

The Liscomb region is well watered by lakes the principal of which are Big and Little Liscomb, Rocky, Prince Arthur and Sileam, to say nothing of Hentus, Porcupine and Chesholm, all of which abound with salmon-trout. If I were to tell of some of the haunts I have made on these lakes it would gladden the hearts of some of the disciples of old Isaac even to hear about them. If Mr. H. of Boston, should read these lines it will carry him back to the days of "old land syne," some of which were spent upon these very lakes.

However, as the sailors say, I am spinning too long a yarn. It was my intention to have given a few sketches and incidents which have happened during some of the many moose hunts he has engaged in; the best weapons; the different modes of hunting and "calling," etc., which perhaps might interest some of the readers of FOREST AND STREAM who may not have had an opportunity to engage in one.

GLOBE SIGHT.

FLORIDA QUAIL SHOOTING.

FERNANDINA, Fla., Jan. 7.

THE cold wave struck us with unusual severity. The mercury went down to 18 degs., and for a week it did not rise above 40 degs. Of course the cold weather brought down quantities of ducks and snipe, and everybody or nobody (pot hunters) that could muster a gun of any description went out. A good deal more game was frightened than hurt, though some of our sportsmen were successful. I went out a short while before the cold snap with my friend S. I had a very good day, as you are cognate to the fact that Fernandina is on an island eighteen miles long, somewhat triangular in shape, the ocean on one side and the Amelia and Nassau rivers on the other two. On the ocean we boast of the finest drives in the world, and do not say it in egotism, but simply state a truth. For fifteen miles on the beach at low tide we have a drive as firm as any pavement and in width sufficient to accommodate as many as twenty to thirty vehicles abreast. Fernandina is situated on Amelia River. The principal street—Center—runs from the town to the ocean, a distance of two miles. The road is shelled to the beach. About a quarter of a mile from the beach an arm of the sea makes in to the island and gives us a beautiful marsh for snipe shooting, about the only good sport that we have on the island. On the mainland, however, about five miles from Fernandina, we have fine quail shooting, and it is there that my fun is generally had.

We left Fernandina on Tuesday morning about daylight with Dandy, my Gordon setter. We traveled about five miles, when we stopped. It was hard work to keep Dandy from bounding away, as he evidently winded birds, but he was too well-bred to go until he had license. We finally were ready, and in about ten minutes my beauty was as "stiff as a poker" in a bunch of weeds, unfortunately very near thick cover. We got in proper distance and I told S. to be on the *qui vive*, as I would go in and flush. They got up in nice style, Dandy dropping to command. I got my bird, but S. scored zero. We reloading and Dandy retrieved the style. As the cover was so thick, I could not go in after them, so we took another direction, and my dog bounded away like a shot, his head up and altogether, to a sportsman, presenting a most beautiful sight. When about a hundred yards away he quartered a little to the right, and although at full speed he dropped in an instant, turned his head to the right and I could see he had a bevy just under his nose. What a beautiful stand! We both exclaimed, and what a lovely play of the gun! I flushed and in a short while four partridges were flushed. Four birds fell, and such a covey as it was! There must have been at least thirty birds in it. Dandy retrieved nicely and we went for the scattered birds. Fifteen fell under the aim of my breech-loaders, and I scored a straight ten out of ten shots S. making some poor shots and scoring only five to his credit. We went about half a mile further and Dan commenced growling very cautious. We looked ahead of us and there before our eyes we saw the quarry running in almost every direction. Dan was in the midst of them and rather flustered, as he could see them and did not know exactly how to get them. He pinned them so closely that they squatted and he was true to his stand. We got three out of this bevy and followed them up, bagging five more before they reached cover. In a small

THE ENGLISH POINTER.

(Reprinted from advance sheets of Vero Shaw's "Book of the Dog," furnished to the FOREST AND STREAM by the author, through Cassell, Petter, Galpin & Co., publishers, No. 506 Broadway, New York.)

There are very few varieties of dog which owe more to the institution of dog shows than the modern pointer does. Up to the commencement of canine exhibitions the majority of the admirers of this breed appear to have devoted the greater portion of their attention to breeding for sporting purposes, and to a certain extent seem to have ignored appearance. Now things are so far changed, by a wider knowledge of the pointer having been extended to the public, that most breeders seem to regard good looks more favorably than formerly. It would not, however, be thought that all those who breed pointers were unimpressed with the desirability of producing a handsome dog, or that they were by any means indifferent to the symmetry of their strain, for many gentlemen have used great exertions to improve their dogs by every means in their power. The inauguration of dog shows, nevertheless, has done a great deal in the way of obtaining uniformity of appearance in the pointer, though it must freely be confessed that more than one type is supported, and we may add that it is always likely to be by the various judges.

With reference to the appearance of this breed, it may, we think, be fairly taken for granted that it is the offspring of the old Spanish pointer referred to in the preceding chapter, and the lighter variety of foxhound, to which allusion has already been made in former pages. The introduction of the latter blood was unquestionably the result of a desire on the part of the pointer's early breeders to increase the pace and stamina of the Spanish pointer, for, as before observed, his *forte* was nose, not pace. The hounds selected for the purpose of crossing with this dog were, we consider most probable, chosen as light-formed as possible, and probably some attention was paid to their color as breeders, no doubt, preferred to get their puppies well marked with white, as such are more easily seen at work than liver or dark colored dogs. The precise period at which the pointer was introduced into this country is, of course, unascertainable, as he is, as he at present exists, a manufactured breed, and consequently made his appearance gradually. That the introduction has been, comparatively speaking, of recent date, is, however, an almost palpable fact, as no mention is made of the pointer in the earlier works on canine subjects. Dr. John Cains, for instance, though fully recognizing the spaniel and the setter, makes no allusion to the pointer, and this he most certainly would have done if the breed were in existence here in his time. He particularly alludes to the Spanish origin of the spaniel; and, as the earlier pointers were unquestionably imported from that country, he would have remarked upon that fact at the same time beyond a doubt.

Gervase Markham, too, gives prominence to the setting dog, but ignores the pointer, and in fact it is only in the writings published toward the commencement of the present century that we find allusion to the latter. This is no doubt due to the fact that shooting was only becoming a popular recreation about this period, and this is clearly proved in the preceding chapter. Up to this time the setter was the sportsman's dog, as his peculiar mode of working was found to be of more service when birds had to be driven into nets that were spread out for their reception. The general introduction, therefore, of firearms into field sports may, we think, be correctly taken as the final cause of the pointer, and, no doubt, on his first appearance the setter fell into temporary disfavor, as it probably never struck our fathers for some considerable period that the setter's abilities could be so easily moulded to suit the novel innovations introduced by the use of firearms as future events have testified.

However, about the period referred to ample mention is made of the improved pointer; and Sydenham Edwards, writing in 1839, speaks of him in the following words:—
"The sportsman has improved the breed by selecting the lightest and gayest individuals, and by judicious crosses with the foxhound to procure courage and fleetness. From the great attention thus paid has resulted the present elegant dog, of valuable and extensive properties, differing much from the original parent, but with some diminution of his instinctive powers. He may thus be described—light, strong, well formed, and very active; about twenty-two inches high; head, small and straight; lips and ears, small, short and thin; coat, short and smooth, commonly spotted or flecked upon a white ground, sometimes wholly white; tall, thin and wiry, except when crossed with the setter or foxhound, then a little brushed.

"This dog possesses gaiety and courage, travels in a grand manner, quarters his ground with great rapidity, and sends with acuteness, gallops with his branches rather under him, his head and tail up; of strength to endure any fatigue, and an invincible spirit. But with these qualifications he has concomitant disadvantages; high spirit and eagerness for the sport render him intractable and extremely difficult of education; his impatience in company subjects him to a desire to be foremost in the points, and not give time for the sportsman to

come up; to run in upon the game, particularly down wind. But if these faults can be overcome in training, if he can be made staunch in standing, drawing and backing, and to stop at the voice or token of the hand, he is highly esteemed; and those who arrive at such perfection in this country bring amazing prices.

"There is a circumstance worthy of notice in pointers, that some of them have a deep fissure in the centre of the nose, which completely divides the nostrils. Such are termed *double-nosed*, and supposed to possess the power of scenting better than others.

"The most judicious cross appears to have been with the foxhound, and by this has been acquired speed and courage, power and perseverance, and its disadvantage, difficulty of training them to be staunch. I believe the celebrated Colonel Thornton first made this cross, and, from his producing excellent dogs, has been very generally followed."

There frequently occur now in modern litters of pointers, puppies malformed by a "double nose," as described by Sydenham Edwards. We use the expression malformed advisedly, as, in our opinion, such a development is not only unsightly, but positively injurious to the animal's power of scent. In certain quarters we are aware of the existence of a lingering superstition to the effect that a "double-nosed" pointer has superior scenting powers, but for our own part we cannot agree with the theory, and have never seen it proved in practice.

would seem that the large proportion of hound blood which then existed in the pointer caused him to be very headstrong in the field, and completely changed the character of the old Spanish pointer, whose extreme steadiness was one cause of his being so popular with sportsmen. According to the "Sportsman's Cabinet," it will be seen in the quotation given below, that the pointer was supposed to have been imported from Spain about the year 1603, but, at the same time, it will be observed that no idea is given as regards the possible period when the Foxhound cross was first instituted. It is, however, we should imagine, most probable that this was not resorted to until the use of firearms in the field became a custom, as when nets only were employed in the pursuit of winged game it is probable that a slow hunting, keen-scented dog was more valuable to the sportsman than a fast and high-couraged one, who would naturally be more liable to flush the birds.

The ideas on the elementary education of the Pointer which were held by sportsmen in the early years of this century are thus expressed in the "Sportsman's Cabinet":—

"The pointer, notwithstanding the beautiful uniformity of his frame, the docility of his disposition, and his almost unlimited utility, has been less noticed by naturalists than any other individuals of the species; hence it may be fairly inferred this particular breed was formerly unknown in Britain, and that the stock was originally of foreign extraction. A combination of circumstances tends to justify the predominant opinion that they were first introduced into this country from Spain (very little more than two centuries since), and that the heavy, awkward, slow and somniferous appearance of the Spanish Pointer is nearly lost in what may be candidly considered the judicious crosses and improved breed of our own.

"It is no more than thirty or forty years since the breed of pointers was nearly white, or most variegated with liver-colored spots, except the celebrated stock of the then celebrated Duke of Kingston, whose breed of blacks were considered superior to all in the kingdom, and sold for immense sums after his death. But so great has been the constantly increasing attachment to the sports of the field, particularly of the gun, that they have been since bred of every description, from a pure white and flecked blue or gray, to a complete liver color or perfect black. After every experiment that can have been possibly made by the best judges and most energetic amateurs in respect to size, it seems at length a decided opinion with the majority that when bred for every species of game and every diversity of country, both extremes are better avoided, and the line of mediocrity more advantageously adhered to; overgrown, fat and heavy dogs very soon get weary in the hot and early part of the season; the smaller sort are likewise attended with inconvenience in hunting high turnips, heath, ling and broom fields."

"The art of breaking Pointers was also considered a most difficult and mysterious concern, many of those denominated dog-breakers having nearly derived their sole subsistence from such employment; that charm, however, has been long since broken, and the simplicity of the process is now so generally known among the practitioners that a tolerably well-bred Pointer puppy may have the groundwork of all his future perfections theoretically implanted in the parlor or kitchen of the dwelling-house before he once makes his appearance in the field. The instinctive impulse of this breed is frequently seen to display itself in subjects no more than three or four months old; where, in still and uninterrupted situations, puppies may be observed most earnestly standing at chickens, pigeons, and even sparrows upon the ground, by sight, before the olfactory powers can be supposed to have attained maturity to prompt a point by scent."

"When a whelp of this description has reached his sixth or seventh month, the process may be proceeded upon in the following way; and either a single dog, a brace, or more, may be managed with equal ease in any convenient spot, room or yard, at the same time, with no other assistance whatever than the alternate expression of 'To ho!' 'Have a care!' and 'Take heed!' (having the small field whip in hand to impress attention and enforce obedience) although the most attractive meat is tossed before them in every direction. The commencement of the ceremony consists in throwing a piece of bread at some small distance before the dog, who, upon making his effort to obtain it, must be instantly checked by a quick exclamation of 'Have a care!' and the assistant terms alternately repeated, to keep him in a patient point of perseverance, till, having given ample proof of his obedience to the injunction, and stood time sufficient to demonstrate his comprehension of the restraint he must occasionally encounter, a vivacious, low-toned whistle, accompanied with a mild ejaculatory cry of 'The on!' will prove the signal for proceeding, which the whole will quickly learn to obey; and it will be found by practice that once the dog may, at the very moment of seizing either the bread or the meat, be as instantly stopped and made to renew their point by a repetition of either of the verbal cautions previously observed. Some there are who consider it a qualification in a Pointer to bring the game to foot when killed, and those



DOGS AND GAME, BY DESPORTES (ABOUT 1700), SHOWING THE EARLY FOXHOUND AND POINTER CROSS IN FRANCE.

Apropos of the "amazing prices" which Sydenham Edwards dilates upon, reference may be made to the preceding chapter on setters, from which it will be seen that at the sale of Daniel Lambert's dogs the pointers fetched lower prices than the setters. On the other hand, in 1848, thirteen pointers were sold by auction, and though only two of them had been shot over, the large total of 256 guineas was secured. The following is the catalogue:—

1. Nelson, by Bounce out of Bloss.....	15 guineas.
2. Nell, by Bounce out of Bloss.....	16 "
3. Drab, by Bounce out of Dido.....	13 "
4. Buzz, by Bounce out of Mab.....	5 "
5. Rake, by Rake out of Die.....	16 "
6. Ben, by Don out of bitch by Rake.....	21 "
7. Belle, by Don out of bitch by Rake.....	16 "
8. Oar, by Don out of Sir R. Wilmoit's bitch.	17 "
9. Crack, by Don out of Sir R. Wilmoit's bitch.	17 "
10. Swap, by Duke out of Bloom.....	25 "
11. Snake, by Duke out of Bloom.....	24 "
12. Rock, by Rap out of bitch by Lord Mexborough's Romp.....	46 "
13. Bang, by Bounce out of Bess.....	46 "

256 guineas.

Lots 12 and 13 were shot over in England and Scotland; the others were well broke.

It may be remarked that Bloom, the dam of Swap and Snake, had previously been sold for 80 guineas.

Subsequently to the appearance of Sydenham Edwards' work, all the writers on canine subjects make special reference to the pointer, and nearly all of them give special directions for his training. From the remarks which appear, it

who wish it, will find it easy of attainment, by teaching them to fetch and carry before they are at all accustomed to the field; it is a mode of being employed they are much delighted with, and never forget, but is attended by the chance of one inconvenience annexed to the experiment; if they become hard-mouthed, and take to breaking both flesh and bone, it is a fault, or rather crime, which generally becomes incurable, and is hardly ever obliterated without incessant trouble and much distressing severity. This circumstance, so naturally likely to occur, it is more necessary to bring to memory, because punishment is at all times unpleasant to the humane and liberal-minded sportsman, who will coincide with the writer in opinion, that prudent prevention is preferable to the uncertainty of cure; and that a slight and salutary correction to-day, may sometimes render unnecessary the doubly and trebly enhanced severity of to-morrow.

The novels readers are essentially practical, and show that considerable attention had been paid to the habits and breeding of the pointer. Of a very different nature is the anecdote told of the worthy priest, in the following extract from the "Sportsman's Repository"—"in fact, the story bears with it the impression that it was merely a playful invention of the author of the work, to excite the feelings of those responsible for the story of the staunchness of Juno and Dash, when Mr. Gilpin was executing their likeness. There is no five give the extract, for what it is worth, merely observing that the story told of the price given for the pointer Dash, and the conditions under which he was disposed of, are, we believe, perfectly correctly referred to, as they are accepted as facts by other writers of that period, who themselves express no doubt of their veracity. The staunchness of Pluto and Juno, is of course, possible; but we should venture to suggest that the balance of probabilities is in favor of it being slightly exaggerated. However, it is valuable as showing that, in the first place, breeders began to recognize the fact that too much foxhound was undesirable in their pointers, as it rendered them headstrong; and, in the second place, that the dogs had become more staunch, or any foundation for the story could not have existed.

For something very extraordinary in the sporting way we must resort to the practice of Colonel Thornton, whose high and laudable ambition it has ever been, both to deviate from the common road and to excel; and he has undoubtedly so far succeeded as to raise a name which will go down with *clat* to sporting posterity. We suppose that the Colonel himself meditated and carried into effect the crosses necessary to produce his famous pointer, Dash, which is, as we have before observed, in all probability three-parts foxhound. This dash, or staunchness, namely, of the pointer, a character sanctioned by his high ranking owners, the moors, the vast expedition with which he cleared his ground, and the intuitive, heaven-born method, said to be almost incredible, in which he hunted inclosures for birds, which was by at once scenting and advancing upon them, without the previous labor imposed upon other pointers, of quartering his ground; add to this, he was a most staunch and steady backer or second of his dogs. Dash was sold by Colonel Thornton to the late Sir Richard Symonds for one hundred and sixty pounds' worth of champagne and burgundy, bought at the French ambassador's sale, a hoghead of claret, an elegant gun, and a pointer; with the annexed stipulation that, if any accident should befall the dog, which might render him unfit for hunting, he was to be returned to the Colonel at the price of fifty guineas. This latter agreement actually took place: Dash had the misfortune to break his leg, and was returned to Colonel Thornton, who considered him in that state a great acquisition as a stallion.

Exalted as was the reputation of Dash, it seems nearly impossible that he could have exceeded in point of steadiness the merit of a brace of other pointers, the property also of Colonel Thornton, Pluto and Juno. Pluto has also been already cited as a famous deer hunter. It is recorded that this dog and bitch, being taken at a point, kept their point upward of an hour, and, in fact, nearly, of the late great hunter Mr. Gilpin could take the skiten from which they were painted for their proprietor, an elegant engraving of which we find in Mr. Daniel's "Rural Sports."

"Many merry jokes have been passed in our hearing, by sportsmen, on the above account, with the view of promoting the cause of ridicule, comparing it with another still more marvellous and well known, given on the authority of a grave and most respectable member of the priesthood. For our parts we really believe both the possibility and probability of the staunchness of Pluto and Juno as just quoted; and although Gilpin cannot be referred to as have justified—we hope for a better—this painting and plastering world, there are yet survivors to whose authority an appeal may be made. It remains to back the above story with the well-known one (but the repetition on this occasion will be pardoned) of the Rev. Theophilus Verity. On a certain Christmas Day this gentleman was riding his nag, on his parish church, which was at considerable distance from his dwelling-house, and his way lay over the most private spot of a secluded and neglected heath. In the deepest recess of this wild heath a pointer by himself, standing at a covey of birds. He looked, admired, pondered on the wonderful and inscrutable instinct of the brute creation, blessed himself and passed on. The cares and studies necessarily attendant upon his calling, however, soon expelled every vestige of the occurrence from his mind, until he was awakened to fresh admiration and indignation by a renewed and stupendous view of the same objects. Exactly on the above day twelve months, passing the same way, his second astonishment was far greater than the first; for he saw, upon the self-same spot, the dog pointing at the birds in precisely the same attitude he had left both parties twelve months before; with this difference, however, that they were then living and breathing, one partly treacherously circumventing, the other audaciously deceiving; whereas now they were in a state of skeleton, fit for a lecture in anatomy, and doubtless, as the reverend gentleman supposes, the partridges were held to their destiny by the well-proved and well-known power of fascination emitted from the eyes of the dog. Now, we particularly request that no light-minded person will attempt to make a joke of this, well convinced, as every rational man ought to be, that there are wonders of which, never having had the experience, he cannot have any adequate conception.

This extract is valuable as corroborative testimony that the introduction of the foxhound cross was first due to the enterprise and judgment of Colonel Thornton; as lovers of the modern pointer will no doubt be glad to know to whom they are indebted for the improvement in their favorite breed, their later exertions having unquestionably been rendered more easy by the good he originally wrought upon this strain of dog. But, long before the publication of the account of the eleven years after the publication of the account of the pointer by Sydney Edwards in "Cynographia Britannica," we find the following description of the pointer given in the "Shoot-

er's Guide," by B. Thomas, or rather, to give the author's correct name, by Thomas B. Johnson.

"The pointer generally to be recommended is of the middle size, well made, active, light and strong. It will easily be pre-ceived that a dog of this description will bear a vast deal of hunting; whereas a small one, however good he may be, is by no means calculated for a piece of strong turnips or potatoes, strong and stiff stubbles, or mountains where the beath is strong and long. On the contrary, it is generally supposed that a large dog is much sooner tired by his own weight than one of the middle size, consequently the latter are in general to be preferred, and indeed I would by all means recommend them. But, at the same time, I would not refuse a large dog for no other reason than his size, as, however large a dog may be, it often happens that he has strength according to his bulk."

With respect to color, which may perhaps depend upon fancy—and no doubt, there are very good dogs of all colors. However, those I would recommend are the liver or brown-and-white. A white dog is to be preferred on account of his good temper, and being naturally less subject to disease than others, which arises from the predominance of phlegm in his constitution. He has an excellent nose, is a curious hunter, is full of strength and cunning, and may be seen at a great distance. Pointers of a brown or liver color are generally good ones, but they are certainly difficult to be seen at a great distance, particularly on a mountain, which gives the sportsman sometimes a vast deal of trouble. At the same time, a brown dog will bring you nearer the game, and is particularly useful when it will not lie well. Birds will suffer a brown dog to approach them much nearer than a white one, which arises solely from his color approximating more nearly that of stubbles, etc. Among which he hunts, and consequently renders him less distinguished object.

"A dog of the lemon or red color is generally of a giddy and impatient nature, as cholera is found to be the most predominant humor in him. In fact, in general, white and brown, or these colors mixed, are to be preferred. If a dog has much white upon him it is an indication of good temper."

The opinions of this writer certainly seem to be largely upon conjecture, for, as far as our experience goes, we have no reason to agree with him that white, or nearly white dogs, are by any means better in constitution or temper than pointers of any other shade. There is much, however, to be said with reference to Thomas' theory, and in defence of any ideas he has formed, that it must be borne in mind that there is every reason to believe that foxhound blood was very largely contained in the veins of pointers about that period, and consequently the lemon or red colored dogs, to which he alludes, may possibly have been nearly allied to the hound, therefore more headstrong than the liver, which partook more of the nature of the steady-going Spaniard. His ideas on the subject of color are certainly sound, as far as they refer to the working of dogs in the field, for it is palpable that a white dog can be seen farther off than a liver-colored one; and also that the latter is less likely to disturb birds than a light-colored one. His reasonings upon the amount of phlegm which asserts to exist in the white dogs are merely conjectures on his part, and given as they are, unsupported by any practical reasons for the assertion, may safely be set aside when the question of colors is to be discussed. No reference to such advantages possessed by one color over another is made in "Kunopodia," an excellent work on breaking the pointer and the spaniel, which was written by William Dobson, Esq., of Eden Hall, Cumberland, in 1814, and this, we are of opinion, would surely have been done by a writer of the generally popular idea at that period that a white dog was constitutionally superior to a dark-colored one.

The foxhound cross has been resorted to by Irish sportsmen of the day for the purpose of increasing stamina and giving a wet-resisting coat suitable to the moist climate of Ireland, and these results were well exemplified in specimens we saw exhibited at a Dublin show, bred and shown by a thorough sportsman of the appreciation of every branch, but whose specialities are hunting and shooting.

[TO BE CONTINUED.]

THE PITTSBURGH BENCH SHOW.

FROM OUR OWN REPRESENTATIVE.

THE officers of the society are to be complimented for the commendable spirit they have shown in undertaking to give a really first-class exhibition, and they are to be congratulated that the show is in every way a success. It is, by far, as regards the quality of the entries, the best that has been ever given in this city, and it compares in this respect with the best shows in the country.

At first it was estimated that the entries would not exceed one hundred and fifty in number, but the official catalogue informs us, that, thanks to Mr. Lincoln, two hundred and eighty two were booked.

The city was alive at an early hour this morning with the barking of dogs, the crowing of cocks, the quacking of ducks, the cooing of pigeons and the gabbling of geese. At eight precisely the doors of the old City Hall were swung open to the public, and the unearthly racket overhead announced that the show was being held on the second floor of the building.

In a large well ventilated hall, fairly adapted for the purpose, the dogs are booked. Three long double rows of pens, the whole length of the room, and in these the sporting and larger non-sporting dogs are stalled, while the small non-sporting dogs are boxed in front of a stage that stretches across the north end of the hall. On each side of the dogs the poultry exhibits are caged, but although both sides of the hall have a number of large windows, the light early in the afternoon was insufficient whereby to see the animals, and the gas had to be lighted. The penciling in all respects is similar to that adopted at the New York shows, and many of the pens are tastefully decorated, prominently those of the "Laverack Kennel" of Messrs. Snellenburg and McConnell, of New Brighton, Pa., and "Superior Kennel," of Messrs. Henricks and Stayton, of Allegheny City, Pa. These have large compartments, so that several dogs can be taken in at the same game. The sanitary arrangements were well cared for and there was an absence of all doggy smell.

The majority of the dogs were in admirable condition, and as the judge was instructed in the bench-show rules and regulations to make allowance for dogs that had been worked this season, a proportionate number of Field Trial dogs put in an appearance.

Turning to the catalogue we find that the classification is

somewhat faulty, the red Irish and red and white setters are pooled under the head of "Irish Setters;" this should not be, there should be two distinct classes. In Class 31 three field spaniels got mixed up with the Irish water spaniels and were ruled out. Class 49 turned out to have no legitimate entries, as its three entries belonged to the rough-coated collie class, no smooth coated dogs being present, the entries were therefore judged with class 48, rough-coated collies. Classes 35, 36 and 37, beagles, contained both the bench or bow-legged and the straight legged dogs, and there was a large number of the former type of dogs present, which is a precat of the former type of dogs. The Maryland dogs, which are a large class of the old stock of Maryland dogs, which have been kept pure with great care for many years; and as the two types are so different and wide apart Dr. T. Waddell, backed by Dr. Maddux, of Baltimore, and Genl. Bond, of Maryland, petitioned the executive committee to allow two typical classes to be established—name y: one headed under the name Maryland, the bench-legged beagle, and one for the straight-legged beagle. The committee's consent was at once obtained, and the Pittsburgh show of 1881 will have the honor of assisting in instituting a precedent that we trust to be observed at all future shows. This, if done, will hereafter bring a large number of entries in both classes. It is full time that harriers should not be classed with beagles, as they were at last year's New York show, and now that our game birds are rapidly disappearing in the East, there will be sportsmen who will turn to other field sports for their amusement. One of the most popular of these will be harrier hunting, and with well-bred beagles this sport can be enjoyed to the utmost. "To obtain well-bred dogs, distinct classes for them must be opened at our shows, and it is the suggestion of Dr. T. Waddell that it might be also well to open classes for dogs under and over twelve inches height of shoulder. Of this, however, more in the future; we shall at once publish pictures of dogs of each type, and in this distinction had to be made sooner or later we consider that there is no better time than now for the discussion of the important subject.

We have already stated that the premium list was a good one, but we must not forget to mention that the donations from outside contributors were liberal. To dispose of two of these prizes two special prize lists were opened that certainly could have no other result but to be of advantage. We refer to special A, "for the best setter dog or bitch of the hard strain," and B, "for second best dog or bitch of any strain." The special A, as it will be seen in the subjoined entry list, closed with five entries, namely, with three English setters and two red Irish. To ask any judge to select the best, where the standards of the two types are so entirely different, is really asking too much of any man. Special prize list B would include the hard strain but arranged to be of advantage to all. The lucky one therefore would go before the world as winner of a second class. This, however, is not the case, as all the entries are of first-class dogs.

The judging began at 2 p. m., both sporting and non-sporting dogs being judged simultaneously. The former were taken to a large room on the third floor at the south end of the building and the latter were reviewed on the stage. The attendance was very large and much interest was taken up to the end of the judging, at 6 o'clock. The show remained open until 11 p. m.

JANUARY 18.

The judging was continued at half-past nine this morning and at the close of the day had been completed. The judging was done by Mr. A. H. Moore, Mr. J. M. Taylor, Lexington, Ky., the judge of sporting classes, and Dr. L. Henry Twaddell, of Philadelphia, deserve great credit for their care and excellent decisions. Major Taylor gave every dog recognition, and there was not one dog brought before him that was not handled by him and carefully looked over. Among the exhibitors Mr. A. H. Moore, of Philadelphia, carried off the greatest number of prizes. He had twenty-five entries, of which twelve were sporting and ten non-sporting dogs. This number was even a special prize but one—two to all. His exhibit was one of the finest ever seen in this country, and his kennelman, Benjamin Lewis, who used to be in Llewellyn's kennels in England, certainly deserves credit for the excellent bench show condition he had prepared the dogs. The Baltimore Kennel also sent eight dogs, under charge of their efficient kennelman, A. J. Kelly. There stock was in fine order.

As the following list will show, there were very few absences: The following dogs were not present: Nos. 3, 16, 26, 41A, 50, 68, 94, 117, 131, 124, 135, 175, 178, 187, 204, 218, 219, 254A.

We publish below a full list of the awards, reserving any detailed comments on the show until our issue of next week.

[Special to FOREST AND STREAM.]

PITTSBURGH, Jan. 19.

A committee meeting of the society will be held this evening at 8 o'clock for the purpose of deciding upon a name for the two new classes of beagles. It is quite probable that the name Maryland will be changed to America, but as yet this matter is undecided.

AWARDS.

- Class IV—Imported English setter bitches, v c h, Minerva. VIII—Champion Irish setter dogs. 1st, Berkeley.
- X—Champion Irish setter bitches. 1st, Loo II.
- XI—Irish setter dogs. 1st, Biz; red, Raleigh; v h c, Flint; h c, Conn; c, Bob II.
- XII—Irish setter bitches. 1st, Gusie; 2d, Nornh; v h c, Alley W., Kathleen; h c, Anabel Lee; c, Juno.
- XIII—Irish setter dog puppies. 1st, Flash; v h c, Ned; h c, Red Ranger.
- XIV—Irish setter bitch puppies. 1st, Red Lion.
- XV—Champion Gordon setter dogs. 1st, Bob White.
- XVI—Champion Gordon setter bitches. 1st, Sheila.
- XVII—Gordon setter dogs. 1st, Goldsmith Kennel Club; 2d, Stoddard; v h c, Cheek; h c, Grasse II.
- XVIII—Gordon setter bitches. 1st, Jessie; 2d, Nell; v h c, Grand Defender.
- XIX—Gordon setter dog puppies. 1st, Grouse II.
- XX—Gordon setter bitch puppies. 1st, Gipsy II.
- XXIII—Champion pointer dogs, under 55 lbs. 1st, Rush.
- XXIV—Champion pointer bitches, under 50 lbs. 1st, Lady Rump.
- XXV—Pointer dogs over 55 lbs. 1st, Banjo; 2d, Tom; h c, Twig.
- XXVI—Pointer bitches over 50 lbs. 1st, Nellie R.
- XXVII—Pointer dogs, under 55 lbs. 1st, Duke; 2d, Dick; h c, Rover.
- XXVIII—Pointer bitches, under 50 lbs. 1st, Rue; 2d, Cleo; v h c, Glymont; h c, Queen.
- XXIX—Pointer dog puppies, 1st, Garfield; v h c, Fawcett's Duke; h c, Lewis Duke.

Philip Wolfenden, Canonsburg, Pa., Young Belton, black, white and tan, 23 months; Rock-Vixen. 25 W. P. McDade, Verona, Pa., Dash, black and white, 3 years; Don-Pat. 26 E. Sleeth, Pittsburgh, Nimrod, black and white, 18 months. 27

Class 15.—Champion Gordon Setter Dogs (best, \$20)—107 A. H. Moore, Rob, black and tan, whelped, 1877; Lang-Floss, 108 "Goldsmith Kennel," care W. J. Farrar, Toledo, Ohio, Rupert, black and tan, 6 years; E. K. C. S. B. (4315), Am. (849), by Shot (1630), out of Rhona (1680).

1231—231* Dr. T. Clay Maddux and Gen. Frank A. Bond, bitch, 8 months; puppy under 12 months, dog or bitch, 8 months; 188 John Bittner and Bro., Allegheny City, Beulah, black, white and tan, 11 months; Gallup's Sport-Martin's Fan, 189* Dr. T. Clay Maddux and Gen. Frank A. Bond, Smart II, black, white and tan, 7 months; Dyke-Dorsey's Vesper, 190* Dr. T. Clay Maddux and Gen. Frank A. Bond,

45 C. C. Maas.—1. What would be the proper weight for a "heavy weight" pointer dog? 2. How high should said dog stand at the shoulders? 3. What would be the correct length of hind and fore legs? 4. My dog's feet are cut, resulting from hunting him on crusty snow after keeping him on the chain for about a month. What shall I do for them? Ans. 1, 2 and 3. We answer your question regarding the measurements of a large size pointer by giving those of Mr. Price's celebrated Wagg: from those you can draw your own conclusions:—Wagg when full grown weighed 70 lbs., his height at shoulder was 24 ins.; length from nose to set-on of tail, 43 ins.; length of tail, 13 ins.; girth of chest, 30 ins.; girth of loin, 23 ins.; girth of head, 17½ ins.; girth of forearm, 8 ins.; length of foreleg from occupip to tip of nose, 10 ins.; girth of muzzle midway between eyes and tip of nose 10 ins.; length of ears 6½ ins. 4. Keep your dog's feet clean by washing with castile soap and warm water, and grease them with mutton tallow. Should the thick cuticle cover

iron. Stem and post are $7 \times 1\frac{3}{4}$ in., the stern-post and rudder-post

—Scarcely less rare than a black tulip, a red-haired negro, or a four-leaved shamrock, is the amazing natural curiosity now being exhibited in the Berlin Aquarium, to the material augmentation of that admirable institution's daily receipts. A milk-white raven, with pale pink eyes and red legs, received admission a week ago to the great central aviary in which scores of beautiful birds flutter and chirp and build their nests in comparative freedom, but his presence there spread such general panic among the remaining inmates of the aviary that it has been found necessary to remove him to a separate cage. Strange as it may seem, the other birds instinctively recognized that this corvine albino was abnormal, and therefore terrible. Many of them became total abstainers from food and drink through sheer fright while he shared their quarters, and huddled together, shivering, at as great a distance from the fearful anomaly as the limits of their prisons would permit them to attain. In all respects he gave its extraordinary hues, the raven is as other ravens. His appetite is apparently insatiable, and he ministers to it with a formidable beak. Neither in tone nor delivery is there any unusual mellowness or tenderness about his croak. His pink eyes could not be more steadfastly engaged in contemplating the main chance were they as yellow as burnished gold. He was found, with a coal-black brood of brothers and sisters, in a nest built by his parents—whose surprise at his peculiar appearance must, we should think, have been considerable—on the topmost branch of an old tree in the Georgenthal, a valley of Thuringen. Doubly an anachronism, this snow-white raven is at present one of the "lions" of the German capital.—*London Times.*

—The cricket field, the hunting field, the race course, the racket court, and the arena of athletic sports, says the *London Lancet*, all number a good many maimed, or even killed, among their votaries, but the undoubted value of athletic exercises to the individual and the nation more than counterbalances the occasional mishaps which must inevitably occur. While it is advisable to avoid anything approaching to brutality in our pastimes, it is equally necessary not to encourage effeminacy, especially in this age, when manufacturers of "gentlemen's corsets" flaunt their advertisements in the public press, and men of the modern aesthetic school write maudlin poems in praise of each other. There are many pastimes infinitely more ruinous to health than we have enumerated above. Dancing night after night in crowded non-ventilated rooms is among the most unwholesome and dangerous practices of modern life, and kills infinitely more persons (though more indirectly) than either the "Rugby" or the "Association" rules. The men who are killed by sitting in public houses or (what is very much the same thing) in club houses, playing billiards or cards till the small hours, and drinking "B" and "S," are not held up as warnings.

Miscellaneous

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REGULAR, with Elastic Band.....	.16	.95	1.10	1.30	1.50	1.65	2.10												
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NEW STYLE (holding eight dozen files at full length) with patent clips.....					2.50														
SAME, extra quality (The "South-Side").....					4.00														
Same, extra quality (The "South-Side").....					2.00														
Inches long.....	4	4½	5	5½	6	6½	7	7½	8	8½	9								

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BRASS.									
Plain, with screw socket.....									\$1.60
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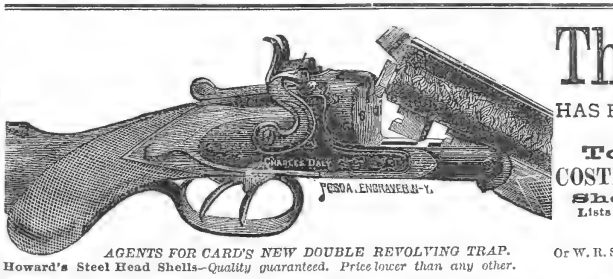
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Inches deep.....	6	12	14	16	18	20	24	30	48

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Linen.....	\$0.40	.50	.65	.75	.85	1.00	1.10
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Inches deep.....	14	20	24	28	30	34	34
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Inches deep.....	13	16	18	20	22	24	24

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IN THE STUD.—Gordons; black and tan, sire Rupert, imported 1871, by Shot, Jr., 1630, E & C S B, ex Rhona, 1630, E & C S B, dam Whip, Stoddard's imported Duke and Gypsy. Fee \$25. Duke of Lechlair; black and tan, limited to 5 bitches, sire, Toledo Kennel Club's imported Grouse, E & C S B, 5091, ex Grace, 3d prize winner Gilmore's, 1579. Fee \$25. Pups from the above and others of the best known Gordons on hand and for sale, also mated blooded bitches in whelp. Address JAS. R. TILLEY, Locust Valley, L. I. Nov25,81

FOR SALE a very handsome red Irish setter bitch puppy, eight months old, from the kennel of James Shiley, Esq., Seneca Falls. Her sire is Dan and her dam Maud, and is granddaughter of the renowned Elcho, bred in St. Petersburg, Russia, and valued at \$10,000. Address J. P. P., this office. Jan19,81

RED IRISH SETTER PUPPIES FOR SALE.—Bred from famous prize winners. Address ESSEX COUNTY HUNT, Montclair, N. J. Jan20,81

FOR SALE very cheap a nice broken pointer dog, or will exchange for a breech-loading gun. THEODORE MEYER, 818 3th st., Jersey City, N. J. Jan20,81

FOR SALE several pure bred Irish red and Llewellyn setters and setter pups. For prices and pedigrees, address B. F. DORRANCE, Wilkes-Barre, Pa. Jan20,81

HOLLIS' WILDAIR, the black cocker stud dog, for sale. Address THE BURDETTE KENNEL, Hornellsville, N. Y. Jan20,81

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WILL EXCHANGE my native lemon and white and a first-class dog (stylish, handsome, well broken and a first-class dog) retrieves from land or water, 2 years old) for a good light-weight breech-loading gun. This is a chance for someone. Box 250, Fall River, Mass. Jan20,81

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FOL SALE, Pindee by Dash III., ex Dora III., Count Dan, Carlowitz, Queen Bess, Frost II., Gladstone, and The above dogs have been broken and carefully hunted by me this fall. Address CAPT. McMURDO, Shadwell Depot, Albemarle Co., Va. Jan20,81

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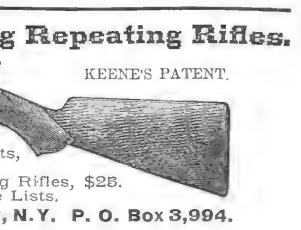
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FOR SALE. a well bred red (with a little white)
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The sportsman can readily send trophies of his
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9 A.M.
Col. Pt. & Whitestone, 7:35, 8:45, 10, 11:25 A.M.,
2:25, 3:35, 4:35, 5, 5:35, 6, 6:35, 7, 7:35, 9:15, 10:45 P.M.,
12:15 night.

Sundays, 9:35, 10:35 A.M., 1:35, 3:35, 7, 10 P.M.
Flushing, 6:35, 7:35, 8:45, 10, 11:35 A.M., 2:25, 3:35,
4:35, 5, 5:35, 6, 6:35, 7, 7:35, 9:15, 10, 11:25 night.

Sundays, 9:35, 10:35 A.M., 1:35, 3, 5:35, 7, 10 P.M.
For Rockaway, 5:35, 11 A.M., 4:25, 5:35, 9 A.M.,
Rockaway Beach, 11 A.M., 4:25 P.M. Sundays, 9
and 6:35 P.M.

Great Neck, 9:35, 11:35, 11:35 A.M., 4:35, 5:35, 9:35 P.M.
Saturday nights, 12:15. Sundays, 9:35 A.M., 5:35 P.M.
Garden City, Queens and Hempstead, 8, 10 A.M.,
1:25, 3:35, 4:35, 5:35, 6:35 P.M. From Flatbush av-
enue, every Sunday and from Hunters Point,
Wednesday, Wed., Fri. and Saturday, 12:15 night,
Wednesdays and Sundays only from Flatbush av-
enue, 10 P.M. Sundays, 9 A.M., 4:35, 5:35 P.M.

Glen Cove, Locust Valley, Glen Head and Ros-
lyn, 8, 10 A.M., 3:35, 4:35, 5:35, 6:35 P.M. Sundays, 9
A.M., 5:35 P.M.

Greenport and Sag Harbor, 8 A.M., 3:35 P.M.
Huntington and Northport, 8, 10 A.M., 4:35, 6:35
P.M. Sundays, 9 A.M., 6:35 P.M.

Lakeland and Farmingdale, 8 A.M., 3:35, 5:35 P.M.
Port Jefferson, 10 A.M., 4:35 P.M. Sundays, 9 A.M.,
Patchogue, 8:55 A.M., 4:35, 5:35 P.M. Sundays, 9
A.M.

Richmond Hill, Glenade, 6:35, 11 A.M., 2:45, 4:35,
5:35, 7 P.M. Monday, Wednesday, Friday and
Saturday nights, 12:15. Sundays, 9 A.M., 6:35 P.M.
Creddonport, 8, 10 A.M., 1:35 P.M. Tuesdays, Wed-
nesdays and Saturdays, commencing April 24th.

HUNTER'S P.T. & W. ST. ANNEX—Leave
Pier 17, E. R. (foot Pier) for Hunter's P.T., 5:35,
10:20, 11:20 A.M., 3:10, 4:40, 5:40, 6:10 P.M. For fur-
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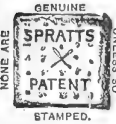
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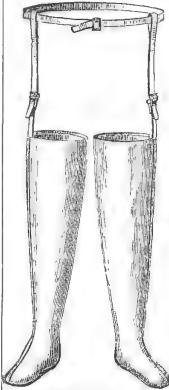
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FOREST AND STREAM.

NEW YORK, THURSDAY, JANUARY 27, 1881.

THE TIDE OF TRAVEL is setting in to the equator. Many scores of tourists are on their way to Florida in pursuit of warmth, health and sport.

A LETTER PUBLISHED in our game columns shows how the proposed "refrigerator amendment" is regarded in the interior of the State.

THE SPORTSMEN'S ASSOCIATION OF WESTERN PENNSYLVANIA reports a roll of nearly 200 members, that number being the limit allowed, a sound financial condition and increasing popularity.

The officers elected to serve during the present year are: President, Robert Dalzell; Vice-Presidents, D. C. Phillips, F. H. Kennedy, S. B. Switzer; Treasurer, W. C. Macrum; Secretary, J. C. Brown; Naturalist, H. S. A. Stewart; Board of Directors, Ormsby Phillips, R. C. Gray, Howard Hartley, W. T. Dunn; W. C. Taylor; Election Committee, John Calwell, Jr., C. A. Carpenter, Chas. Hays, Edward Gregg, W. A. McIntosh, Henry Holdship, Benj. Bakewell

THE MIXTURE of sand or pulverized glass with gunpowder, in order to separate the grains of the latter and thereby make its transportation safer, is nothing new. It was tried as far back as 1835 by Plobert, in 1841 by Fadeiff, and again in 1855 by Capt. Ritley and by Gale of England. The man who is alleged to have been exhibiting this device to "scientific and practical men in Jersey City," must have talked very loud to have made them believe that it was a "recent English invention," or else the company was not so "scientific and practical" after all.

THE COCKER CLUB.—We have received the names of seventy-five persons who have expressed their desire to join the proposed Cocker Club, and in accordance with the plan already stated, we send circulars this week to the members calling for the selection of a committee to perfect the organization of the Club. It gives us much satisfaction to congratulate the owners and breeders of cockers upon the promising condition of affairs and the assured success of the Cocker Club.

GEN. HANCOCK AND RIFLE PRACTICE.

THE acceptance of the Presidency of the National Rifle Association by Gen. Winfield Scott Hancock puts a man with rare executive ability in a place where he can have a full exercise of it. The election was unanimous, and the General can rest assured that that feeling is shared by every member of the National Rifle Association. He is not an untired man, and for one holding a position of so many and such important responsibilities, he has found time to give considerable attention to the matter of rifle practice. He it was, first of all army officers holding commanding posts, who appreciated the fact that the volunteers were far ahead of the regulars in the matter of skill with the rifle. When the fact became apparent there was a frank acknowledgment of it, and Gen. Hancock instituted prizes and in various other ways set about supplying the deficiency which he saw existing among the men under him. The other departments fell into line, and with the establishment of the Hilton trophy, which might without impropriety, and with an entire regard for fact, be styled the Hancock trophy, the new president completed an effective plan of getting rifle practice on a firm basis in the army.

Gen. Hancock, too, will command the entire confidence of every class of the shooting men. Though an army man all through his life, he is thoroughly aware of the fact that rifle-shooting is far more than a mere branch of the soldier's duties. He is a man of society and the world, and will appreciate fully what is being done to build up rifle practice throughout the country as a gentlemanly sport, free from all tendency toward gambling and questionable practices. It is entirely proper that the head of the National Rifle Association should be an army officer of high rank. The British National Rifle Association is presided over by the Commander-in-Chief of the British armies, and under the Duke of Cambridge the small bore men have had no real cause of complaint that their wants were not looked after. Ample provision is made in the Wimbledon programme for the shooting of any-rifle, all-comers matches, and Gen. Hancock will see to it that the division of the work of the N. R. A. is well looked after. Under Gen. Hancock the association may become truly national in extent, in influence and in power to unify and systematize rifle shooting, as well as in name. He has assumed the position with a very clear idea of the work to be undertaken, and he has declared his conviction that the association can be built up to a position of general respect, and be made a valuable adjunct to the army and its methods. Under such a presiding officer there should be no difficulty experienced in securing a liberal prize list, and with this the entry lists soon fill up; and while we are not over sanguine of ever seeing anything more than sudden rushes to Creedmoor so long as it remains isolated as at present, we do expect to see the year 1881 make a showing in target practice as fine as any of the preceding ten-years of the association's existence. The desire to enjoy the rivalry of competition before the bulls is as strong as it ever was, but in very few cases is it strong enough to induce men to make a toil of a pleasure, and sacrifice a day for an hour, to give up to riding and waiting about in railroad depots above five hours to secure an hour's practice on the range. There has been too much of the *laissez faire* policy in the past, and with attention and zeal in place of neglect and apathy great results may confidently be looked for.

In Boston the Walnut Hill range shooters have shown an appreciation of things by the selection of L. L. Hubbard for the Presidency and A. C. Gould for the Treasuryship of the Mass. Rifle Association. They are men well versed in the technicalities of rifle shooting, and it is certain that under them the wants of the actual shooters will be looked after; and Boston, if such a thing were within the probabilities, may be expected to surpass her own champion record.

TRANSPORTING YOUNG FISH EGGS.—The letter from Mr. von dem Borne in our last issue on the subject of his experiments in transporting fish eggs which had never been in water, in the bladder of an animal, is worthy the attention of our pisciculturists. If this can be done with eggs which are as delicate as those of the cod and shad or other floating eggs it will prove of great practical value.

THE MAINE SYSTEM.

ONE year ago the plan of making the Maine Commissioners of Fisheries Commissioner of Game also was an untried experiment. It is such no longer. The wisdom of the system and its efficiency are amply attested in the detailed report just published by Messrs. Stillwell and Smith. Portions of the report are published elsewhere. As the record of the first year's working of the new system it is worth a careful study.

There were serious obstacles in the way of the Commissioners. In the first place there was no adequate provision of funds to enable them to do the work as it ought to have been done. As soon as it became known that there were two officials whose duty it was to prosecute violators of the game law, a flood of complaints poured in upon the Commissioners from every part of the State. To attend to all of these separate complaints the writers of the report tell us was beyond their power, and the result was an imputation of blame where it did not properly belong.

But hampered as the work was, the accomplishment is most gratifying and creditable and full of promise for the future. The Commissioners have really done something. Men who have killed game out of season have been prosecuted and made to pay their fines. Others, who saw that the prosecutors meant serious work, came forward and paid their fines of their own accord; other cases are now on the docket awaiting their turn.

These prosecutions mean much more than the punishment of these individual violators. They are showing the people throughout the State that the game laws mean something and are not to be ignored. It is for this reason that we say that this first report of Game Commissioners of Maine is full of promise for the future.

If a system of game protection, whereby the laws are enforced by game wardens and a game commission, works well in Maine, why will not the same system work equally well in other States?

MICHIGAN SPORTSMEN'S ASSOCIATION.—The special dispatch to the FOREST AND STREAM, published in another column, reports a large convention at Lansing, and a meeting, which like previous assemblies of the Michigan sportsmen is characterized by a spirit of earnest work. The report of the papers read and the transactions of the society are necessarily too brief to warrant extended comment upon them now. We shall publish the proceedings at length hereafter, and meanwhile congratulate the people of Michigan that there are among them a number of sportsmen so intelligently and faithfully endeavoring to conserve the fish and game interests of the State.

THE PRESENT DEMAND upon the columns of the FOREST AND STREAM is altogether unparalleled in the history of the paper. To do justice to the paper and to its friends it has become absolutely imperative to make some provision where, by the capacity of the pages shall be increased. Next week, therefore, the first number of Volume Sixteen will appear with a change of type in several departments. This change will be equivalent to an addition of two pages to the paper, and with the increased facilities thus afforded it is hoped that the value of the FOREST AND STREAM may be proportionately enhanced.

OUR ALASKA LETTERS.—The map which we republish with the "Log of the Favorite," is the first chart of that part of the Alaska coast ever made. It is due to the writer of these articles, Capt. L. A. Beardslee, of the United States Navy, to note here the wide interest awakened by his letters to FOREST AND STREAM. (Capt. Beardslee is to-day the best informed man on Alaska affairs in the country, and his descriptions of the land, its products, fauna and inhabitants, are the most vivid and truthful pictures of that country to be found in print. The series, of which the present paper is the fourth, was begun in our issue of Nov. 25, with the account of the Chilcats and Chilcoots. It will extend through one or two more numbers, the concluding chapters being fully equal in interest and information to those already published.

AMONG THOSE who called at the office of the FOREST AND STREAM last week was Hon. Jno. S. Wise, of Virginia.

Mr. Willoughby afterward in speaking of this interview remarked "that the Cap. played it low down on the old Siwash and raked in the pot," whatever that may mean.

We had planned for an excursion to the glaciers, but an advance guard of icebergs which were drifting past the mouth of the harbor paused as it reached the western cape, reconnoitered us, and whirling began to slowly advance upon us. The leader who was a huge fellow soon paused, for his foot came in contact with the bottom, but several smaller ones were not so considerate, and we came to the conclusion it was best to respect their pre-emption claims and seek for a better shelter, so hurried up our anchor and started for Mud Bay, where we passed a comfortable night.

Having thus brought the log up to date, I will devote a few lines to the sea otter, which in my last letter I spoke of as a noble animal. To me he seems, both from a commercial and sportsman's point of view.

The skin of the otter is worth more than that of any other animal except the royal ermine it brings in Alaska from fifty to one hundred and fifty dollars. Unlike all other skins of this country, it needs little assistance from the fur-dresser's arts; the black hairs are not dyed, and the white ones not sewed in, therein differing greatly from the imitation called "pointed beaver," and from the fur seal, the raw pelt of which has no more beauty than that of a calf.

They are very wary animals and are worthy of being considered game, for none but the most expert hunters are successful in capturing them. The fur seal, millions of which return annually in great herds to the Pribilof islands where they are driven and slaughtered by clubbing, the otters go singly or in pairs, and their range is a large one. I believe they are found on the western shores of Behring Straits, and they have been plentiful from our westernmost possession, the island of Atton, along through the Aleutian group through the Gulf of Alaska, and the Indians of Vancouver Island kill them on the western coast while in spring making their way north.

Many of all nations join in their pursuit, and even undergo the hardships incident to marriage with native women for their sake.

The otter was to a certain extent protected. No white man could kill them, and no firearms could be used in hunting them, but with inadequate force to carry out the law it soon became a dead letter. A number of white men of various nationalities had settled upon the island of Ounga (near the point of Alaska), and they employed themselves in otter hunting. In 1878 the Treasury Department gave special permission to such whites as were married to native women, and intended to remain in the territory, to hunt them, which permission put otters at a discount and women at a premium. But very little ceremony was needed to give them full rights to both otters and women, which without it they had owned.

These squaw-men by their steady hunting, frequently with guns, are greatly reducing the supply. At Atton, where they were once abundant, but seven were killed last year, and in other resorts they are decreasing. A skin worth \$50 per square foot is worth working for.

The method of hunting the otter, as practiced by the Indians of Southeastern Alaska, and I presume much the same elsewhere, is as follows: The hunters go in companies of three canoees, each carrying ten paddlers, the one in the bow being armed with a spear or bow and arrows. Lately, muskets have been introduced, which are loaded with buck-shot; but this is illegal, and tends to drive the animals from their breeding grounds, which are on rocky islands close to the shore, just to the northward of Cape Spencer.

The animals seek these islets in May, and the hunters rendezvous at them. When an otter is seen approaching they endeavor to form a circle to seaward of it, as quietly as possible, and then close on it. When alarmed the otter dives and endeavors to make its way to sea. Although less able to remain under than the fish, its first dive will sometimes last for an hour; but if quickly discovered and followed on reappearing, it soon becomes fatigued, and falls to the lot of the boat which first wounds it. Great care is taken to hit it in the head, and some of the Indians are expert shots.

Any dispute as to ownership is referred to old Kah-hoo-doo-sak, who listens to all of the evidence, and gives a decision which is never questioned. Willoughby was present at one such arbitration. The old man gave the skin, worth \$70, to one of the contestants, who was to pay to the other seven blankets, worth \$21.

All captains of companies report to this chief the number of their otters, and he keeps a tally. This year 127 have been killed, worth probably at least \$10,000. The Indians say that they don't kill the female at this spring season, but the skins of unborn sea-otter pups are frequently on sale. I suppose that they refrain, fully as much as does the ordinary supporter of game laws in New York from killing dogs and the Adirondacks and out of meat.

In fall there is another short season, during which all adults are killed without distinction. On nearly every one of the Aleutian Islands, in several places in the Alaska peninsula, and in as many or more along the western coast, the Alaska Commercial Company and the Northwest Fur Company have agents stationed who practically monopolize the market in the vicinity.

Hooded Dick admitted that some of the Alaska hunters used this species, I asked him why they did it, and he said that the English Indians used them, and unless they did also they could not get near enough to kill the otters by other means. He and Kah-hoo-doo-sak have promised to break up the custom.

To-morrow we start for Chilcat and the glacier. PISCOS.

FROM NORTH CAROLINA.

It has been said that we, like Rip Van Winkle, sleep. I do not write to deny the charge, but to tell you how blue the sky and bright the sun under which we sleep. We do not know much about the excitements and turmoil which disturb a great city, nor do we swelter through a breezy night among heated brick walls. We do not hear Mr. Beecher or Mr. Talmage on Sunday, or know about the last opera. We see the caricatures of Nast and occasionally read of the mud which your politicians and our own set stir up, but happily we are not inclusive, no longer disturb our minds about it, but live in the genial climate, harvest fields, summer fruit, shady groves and soft winds, sweetly dreaming of the charms of the beautiful forest, "the mellow horn," "the voice of the hound on the breeze of the morn" and the rustling wing—at the falling of the leaf. The United States of North America is probably by natural endowment the finest country in the world, and North Carolina is as rich in all that goes to make a natural life desirable as it is possible to

bring together in any one State. Why should we not be happy, and if we wish, sleep? The game prospect is quite good. Most of the early broods are large enough to escape the recent heavy rains, so that quail shooting will probably be very fine. I understand there are a great many young turkeys, and no doubt the deer are doing well.

The State is divided into three belts running northeast and southwest. The first is from one hundred to one hundred and fifty miles wide, and lying on the coast (sea) known as the pine belt, is a level country, and has for game quail, turkeys, ducks, deer, and in the heavy swamps near the coast black bear. The middle belt is a rolling country and extends about one hundred miles further inland. Being a small grain country it has more quail and squirrels. Turkeys and deer are reasonably plenty. The next, the mountainous portion, has grouse, quail, turkeys, deer and bear. The middle and western portion, especially the middle, affords as fine quail shooting as any reasonable sportsman ought wish. There are a few quail and deer, but the country is so full of so many convenient swamps and thickets to which they usually take at the first flight that one need be somewhat expert in thick cover to make a good bag. Indeed, he need by no means be ashamed to bag only half his shots unless he is a poke who takes only open shots.

There is hardly a place in North Carolina where a true sportsman may not enjoy himself. The great trouble with those who come into this State for shooting is that through a long summer they have dreamed of, and wished, the time to come, until when they do start it is with inflated imaginations, and they are soon disappointed because they don't drop immediately into an Indian's heaven. Let one leave the false glare and glitter, the hollow show of a city life with a view to some weeks with nature and her charming loveliness, and he may be assured that he will find it, with fair sport added, in North Carolina. He can amuse himself with ignorance as primitive as the most fastidious could desire or test his manners with intelligence and grace as courteously as adorns any court in America. He can shoot the spotted bull, or hunt in harness to the plow, and not a mile distant the most perfect modern machinery and implements of agriculture.

Although we offer both a field of sport and interest. We are a peculiar people, with our "peculiar institution" gone, and although we have gotten used to the loss, we have not all learned the most profitable ways of the "new departure." It is sad to think that many years will come before a clear, round shape will be given to what should be the prosperity of a people so blessed in soil, climate and mind. In saying that it is hard to teach an old dog new tricks is as applicable to men as dogs, and I am inclined to think it especially so of men who live under a Southern sun. No condition, however, of climate, age or poverty seems to dull the senses of sportsmen for the fine points of the "new departure" in guns and dogs. In early autumn the sharp crack of the breech-loader is heard all over the State from the sea to the mountains. Those beautiful October days, when the blue hills sleeping in the distance, the faintest misty veil hangs over the gray woodland, and the eye searches out here and there, the fields of brown stubble, more beautiful to us than foliage or flower. 'Tis blessed to have life on such a day, no matter how much we "think what might have been."

E. L. H.

Natural History.

DOMESTICATION OF THE OSTRICH.

BY E. B. BIGGAR.

IT will perhaps surprise some of the readers of the FOREST AND STREAM to learn that one of the ostrich farmers now used in the civilized countries come from the hands of farmers and are clipped from fanned wings as wool is taken from the sheep. Yet such is the case, and as I have no doubt that all readers of the FOREST AND STREAM would be glad to know something of these "farms," I will take them on an imaginary visit to one in the colony of the Cape of Good Hope.

It was here, about twenty years ago, that a Cape farmer, whose sheep had failed him through disease and drought, conceived the idea of domesticating the wild ostrich and breeding them for the sake of his feathers and of advancing a business of the industry. With much public spirit he advocated this for the benefit of his fellow-colonists as well as himself; but although some farmers had occasionally, from almost the earliest days of settlement, caught some wild chickens and kept it on their farms, no one seems ever to have thought of making it a trade or business. The farmer mentioned above, whose name was Kinnaird, demonstrated that the sale of the feathers was profitable, but it was not until about 1865 that other farmers began to adopt the business. In that year there were eighty true ostriches in the colony in various districts, but so profitable did the business turn out and such a mania did it become that within the succeeding ten years the number had increased to 50,000, and within the past five years that number has again been doubled. It is now, therefore, a regularly settled industry, spreading through the other colonies of South Africa. It is not the object of this article to deal with the "trade," but rather to give some idea of the character of the farms and the kind of life the farmer leads. Imagine yourself planted down in an inland district, or as it would be called here, a county of the Cape, say Graaff Reinet. In one quarter of the horizon perhaps some gray mountain rises high over the surrounding land, but on all other sides is a bare ocean of treeless undulations, rolling endlessly out of sight. Here and there, on a closer view, we see far away a clump of bushes, or a ridge of gray rock, appearing as night a "white cap" in the water to break the monotony of the landscape. The landscape is washed dwelling shines like the face of a light-house on the bosom of the ocean. It is and its attached buildings are the only houses in sight, and these are the ostrich farm. The farmer is not an old Cape colonist of Dutch extraction, but a genial Englishman, and to your astonishment greets you with the accent and polished style of an educated Londoner. How did he get here in this wilderness, resigning the privileges of refined society in an enlightened land, with all the comfortable surroundings of a fashionable life, for these huts? And he tells you as we enter his home that these are the very things that have driven him here. He tells you that English refinement is cloaked hypocrisy, and the modern five-meal-a-day style of living is bringing the noble Englishman with his contemporaries down to the effeminacy of women. He has broken through these toils and is now here in an air where he gets a good appetite, and endeavors to live a life more in accordance with nature. Brown bread, mutton and the plainest, lightest pudding now takes the place of the

injurious dainties of the English "highly civilized" table, and he finds his dyspeptic miseries vanishing without medicine. But we have come to see his ostriches not to hear his life. "You hear that noise?" asks the farmer in seemingly irrelevant reply to our statement of the object of our visit. "Yes; it is like the low trill of a policeman's whistle. What is it?" "Here, Nasilwana," says the farmer, "take the cover off that box."

Nasilwana, a stout, well-conditioned colored fellow, born probably in some wild-bush dell in England, removes a rug from a biscuit box in the corner, and up starts the head of a beautiful bird. You name three or four birds which on after-thought you conclude it isn't, and then you make up your mind it is some wild African bird you have never seen. And it is, for it is a chicken ostrich. "And is that the way you hatch them?" you may ask. "No; that is a chick, the last of a whole brood. I suppose the old bird got tired waiting for it to come out, and left it to its fate. But the old birds are generally very careful hatches, and when a chick is too feeble to pick the cover off the shell, they help it out often by breaking it themselves." "I thought they hatched their eggs in the sand like a turtle." "Not in this country. Many of them never leave their nests during the whole time of sitting, not even for an hour; but some birds lay their eggs about, and will not hatch at all. Wild ostriches are often so disposed, they say, and this has been the origin of the notion among hunters that eggs were hatched in the sand. This little chick I brought out yesterday, and it is a fine specimen of the new brood. It is not a tit to-day. When I bring the old birds up I will try to struggle this bird among them, for they sometimes refuse to acknowledge a chick that is not their own, and frequently kill them—perhaps eat them afterward." The chick is now set out on the floor, and what a beautiful creature it is to be sure. Its scaly legs, very stout, but not ugly, stand upon two toes each—two comical looking members, one large and one small, the large one terminating in a hooked nail that dominates upon a formidable weapon in the old bird. Its clumpy body is already as large in appearance as a hen's, and covered with a down, yellowish on the breast and brownish on the back, while over this down little porcupine-like quills, about an inch long, some dark and some light, stick out in all directions, as if chopped hay had been sprinkled over the creature's back. Its well-sloped neck is covered with a sort of fur like fine seal, prettily mottled and striped in black and brown, and this organ is surmounted by the most beautiful and shapely crest possibly to imagine in an undeveloped bird, consisting of the soft, fur, but darker brown in color, its intelligent looking crown spreads above a pair of eyes remarkably full and expressive, and a most comely beak completes the picture. When placed upon the floor he sits comically upon his haunches and looks inquisitively about as if to inquire what is the meaning of it all. We are now told that this is the way they do for the first two or three days of their open air existence and that at the end of that time the first thing they eat is not food but pebbles and sand and pieces of their own shells. This is to prepare their gizzards for the entrance of food. They then eat insects, snakes, lizards and grasses. Now let us follow the farmer to the ostrich camp.

What is a camp? On this farm it is an inclosure of varying size from half an acre to ten acres, fenced in with a hedge of dry low brush known as "grass" in many parts here. The fence is only three or four feet high, yet it is sufficient to keep the largest ostrich within its limits, and we are confidently told by the farmer would serve that purpose if it were made of iron. The fence is not a fence, but a rule little gate and in a peculiar drawing looks like a gate. "Cool-cool, cool-cool-cool," and lo! a big stick with a knot on the top of it rises out of the thicket at the other end of the camp. No, it is the neck of an ostrich, as we can now see by its large black body, moving out into the open space. He knows the call well enough, but he is not so anxious to respond even at the sight of a dish of mealies (Indian corn), as he was before he had charge of the little brood that may now be seen lurking about him. In fact, he has become the other more truly than the other birds, who now appears to view in another part of the camp. Whether he might come if a stranger were not present is a question, but at all events he merely walks to the other side of the camp and takes observations. At last our host considers it best to take the chicken in to him, if he will not come. The little basket in which the chicken now is placed, covered from sight, is taken up, and he enters. "Do we wish to go in with him? Certainly we do. Then take this in one hand," he says, the farmer handing one of the long bones of a chicken cluster of the thorn bush left on the end. "What is this for, we ask. "That is a tick. When either of them make at you just keep that at his neck. As long as you can do so you are safe. But if—"

At this point we conclude that it will be better fun to sit outside and watch. The farmer smiles a grim and cruel smile and goes in alone with the "tick" in one hand and the basket in the other. On approaching the great black bird, with his head high above the farmer's, slowly he rises, like the deliberate swing of a pendulum, and begins to rise like a serpent. At the signal the chickens flutter, scatter and disappear in a most unaccountable way. The farmer after an ejaculation of disappointment, edges the bird down toward where we are staying, and going to the spot near where the birds have disappeared, takes advantage of a moment when the old one does not seem to be watching and empties the tick out. Strange to say, the little fellow disappears, too, from my sight in the grass, which his back so much resembles. We now retire to a distance from the camp and watch the events. By and by, after the old birds seem to have forgotten that we have not gone away, the cock bird utters a plaintive sound, a sort of wisp without the p, and in a few moments the chickens, well knowing the sound, are again at his side. Rather to the surprise of the farmer, on counting them there is one more chicken than the original brood consisted of, so that the lately hatched chick had come, too, in ready response to his call and had heard the farmer's back so much resembles the old bird, as it afterward transpired, did not know of it did not subject to the increase in the family. Now we go to another "krall" or camp. Here is another pair of birds whose pale legs, sickly beaks and poor-looking figures are pointed out as signs that they have finished their incubation, and their broods being taken away are recuperating their strength for another season. At this time they are quite tame, and there is seldom any need of the "tick" when going among them. Another camp adjacent to the first one is hatching. The farmer just begun their labors, which he must have done some time of an ordinary hen, and their legs and beaks are crimson red in some parts. The hen is now on the nest, and is not easily perceived, although there are so few bushes in the camp, and even those small and straggling. There she lies, with her head and neck stretched prone upon the ground, but her eye quietly watching our movements. Under her doubled-up legs two or three of her monstrous eggs may be

seen. The nest is not a nest in the ordinary sense of the term, but a spot of earth scooped out in the form of a saucer, the edge being formed simply by the day-by-day work of the bird in scraping up the sand under her with her beak, thus forming a trench which serves the useful purpose of keeping out the water in case of a thunderstorm. These are events much to be dreaded, we are informed, and in the case of hillstoms, which are not infrequent, birds are sometimes killed on the nest. The female is now sitting, but about four or five o'clock the male will come and relieve her and will occupy the nest all night and until eight or nine in the morning. As the color of the chicken's back evinces the degree of benefit derived from the securing the helpless little things from observation, so this provision by which the male takes so large a share of the hatching shows equally the wise designs of its Creator in protecting it from dangers. Its black color renders it least likely to be observed and it is braver and stronger in the fight; for we are informed that it has many enemies, such as the wolf, the tiger and the wildcat. The latter is the most villainous plunderer, and comes upon the bird at night, the most sneaking ways possible, he and the wolf ever seeking to draw the bird off its nest, with the object of springing among the eggs. The farmer and his neighbors are well aware of this and they provide seasonable dishes of meat and strychnine, deposited at intervals about the nest, with the result that every two or three mornings the bloated carcass of a wildcat or wolf is found in the vicinity of the camps. Other birds in pairs are to be found in other camps and in a large camp or field are more than fifty young birds, hatched, if such a term can be properly used, by a Hottentot boy. Here they are running about, each busied to the utmost in snatching up grass and insect food about the veldt. They are of all sizes, some appearing to be fully grown, others to be scarcely larger than turkeys. On some of the small ones the bristles on their backs are fewer and on the larger ones they have nearly or altogether disappeared and given place to feathers, more or less downy, and turning gray or black, according to sex. Color in this respect the young birds are fully shown at a year or two, when the cock is quite black and seems to be about as large as he ever gets, yet complete development, as shown in the rise of the pairing instinct, does not take place till three or four years. In the meantime two or three clippings of feathers have been taken from them, the first at the age of a year. The farmer informs us that if we wait till morning we will see the young birds waltz, and as we feel sure that an ostrich dance will possess as much grace as the dances of things gifted with reason, we will wait to see what it is like. [TO BE CONTINUED.]

A PET ARMADILLO.

A SHORT time since the six banded armadillo (*Dasypus novemcinctus*) in the society's collection became unwell, and in order to nurse it properly I took it into my office, where, as it gradually improved, it became a most interesting pet indeed! On its convalescence I had become so accustomed to having it for my sole companion during the long winter evenings that I was loath to transfer it to its old quarters.

"Piggy" generally passed the day asleep in a shallow wooden box in one corner of the room, but just before dark he would begin to stir about so as to get thoroughly awake when the keeper appeared with his supper. After eating he would search the floor for any flies which during the day had been killed and thrown under the chairs and tables. When he became satisfied that he had secured all of them he would tumble over all the boots and shoes and look through for a stray cockroach. He would start one and drive it into the bright light when I would have a fine exhibition of his wonderful power of scent. The roach would scarcely cross the sill of the door before Piggy's nose would come into sight following every twist and turn of his prey, sometimes nearly across the room before it was captured. Occasionally it would be a cricket instead of a roach, and then Piggy would generally come off second best, as there would be a hiatus in the scent whenever he would start one and drive it into the bright light. The waste-paper basket his game as to cockroaches, and his contents scattered in every direction. One night while investigating it an unfortunate cricket was routed out, and in his hurry to escape sprang against the wall falling back on the floor. Piggy was equal to the occasion, and by a sudden rush secured his quarry before it could recover and attempt a second spring.

One of his favorite foraging places was underneath the safe, and I was amused severely when he would attempt to climb up between it and the wall. Finally he succeeded in ascending a short distance when I heard a faint squeak and caught a glimpse of a mouse darting into the closet. Piggy came down "all of a lump," but managed to bring along in his powerful claws a nest containing three or four young mice which he immediately devoured with great enjoyment. Often in his rounds at night the watchman would kill a rat and bring it in as a special treat. As soon as it was thrown on the floor it would be attacked just at the flaps, where an entrance would be affected by dint of clawing and chewing, to the viscera, which would be torn out and eaten, but no further notice would be taken of the carcass.

At first he was quite shy, and resented any attempt at petting, but he gradually became so tame that he would allow me to lift him up into my lap, where he would remain quite contented so long as I would gently scratch him about the neck and softly draw my finger across the smooth skin between the bare and scaly parts. At first he would not permit an adjoining room he was within a few feet of the door foraging for flies, when he came to a sudden stop, and instantly "down charged," in which position he remained until the music ceased, when he slowly got up, stealthily approached the door, and snuffled along its lower edge as if he were trying to scent out the cause of such unusual sounds. He invariably acted in a like manner on similar occasions, but the periods of rest shortened as his boldness increased, until at last he reasoned that he could devote a few minutes in descending to the cultivation of his aesthetic tastes at the expense of his appetite. I have frequently endeavored to frighten him by making loud and unusual noises, but never succeeded but once, and that was unintentionally. The office becoming too warm I turned off the steam from the coil, and being busily engaged in writing neglected to open the valve again until the metal had become quite cold, and the flow of the steam was given by a sharp crackling sound, which caused him to give a convulsive start, and he instantly dove underneath the safe. As the noise gradually ceased he peered forth making a low, tremulous sound caused by rapidly forcing the air through his nostrils, and at the same time giving them a quick, vibratory motion.

I am surprised that one so correct as Mr. Packard should have made the following sweeping assertion. In his "Zoology," p. 580, he says: "By rolling into a ball these singular creatures (Armadillos) become thoroughly protected from their enemies." I believe that it is well authenticated that some of the species are capable of rolling themselves into balls; but certainly not all of them, my little pet, for instance, as his structure absolutely forbids any such feat. The most that he can do is to tuck his head down between his front legs, and the moment he does so the imbrication of the plates is so slight, he exposes a series of parallel bands of soft, velvety skin to the attacks of any predatory mammal or bird. We, the very skin is different, as I know to my cost. One evening, while in the interior of Java, as I was sitting in front of the hotel, in pajamas and stockingless feet thrust into slippers, enjoying a post-prandial cheroot and trying to keep cool, my attention was attracted by the statuesque figure of a Malay, simply clad in the national sarong and enormous umbrella hat, just in front of me. In the twilight I saw a spherical body lying at his feet, which I picked up for the purpose of closer inspection. It proved to be a pangolin (*Manis pentadactyla*) I think, but I did not finish my examination. In turning it over it slipped from my grasp, and in attempting to catch it I received from one of its scales a nasty, wire-edged wound, just across the middle joint of my forefinger, producing a sharp, burning sensation, very similar to one experienced years before in my boyish attempts to manufacture a "cornstalk fiddle." I immediately glanced up to see the effect on my native friend, but a trickle of mirth or a quiver of pity crossed his swarthy features. He quickly stooped down, picked up the animal, and noiselessly strode away in the rapidly-increasing darkness, while I sprang back on the piazza, venting maledictions on my stupidity and the characteristic imperturbability of the entire Malay race. FRANK J. THOMPSON.

Zoological Garden, Cincinnati.

DOMESTICATION OF QUAIL.

ROCKLAND, Me., Jan. 8.

Editor Forest and Stream:

I have read with interest the articles in the *FOREST AND STREAM* about breeding birds in confinement. I tried the experiment on a small scale last summer and had a good deal of pleasure in watching the birds, although I was not successful, but I gained some experience which will be of use to me, and perhaps to others, in future attempts in the same line. I propose to try it again this summer if I can get some quail. Last spring I procured twelve pairs of fine, healthy birds from a dealer in New York. I think they were from the West. I once sent to Connecticut for some Southern quail, and out of three dozen, one-half of their arrival were dead, and the other half were so feeble that they all died. The first point is to have healthy birds.

I turned out most of the birds. Four pairs went to the Hon. Moses Webster, on the Island of Vinal Haven and I am informed they bred and I hope will get through the winter with a little help.

But to return to the breeding of quail in confinement. I had made a pen a year before for some migratory quail, which I released, being convinced that they would not breed. The pen was large—about thirty feet long, four wide and sloping from two feet at the back, which was against a tight board fence, to fifteen inches high in front; sides all solid, top of rails, with some cover in one end for them to retreat to in case of fright. I had holes for observation, and never a day passed that I did not spend more or less time in watching them. I would stand for length, rewarded by seeing them commence their nest-building. And here I would say that I never saw either of the two hens lift a straw toward building the nest; the cock made them all—and there were four or five of them—by sitting back to the nest and seizing bits of roots, straws, etc., and passing them back, first one side, then the other. I also noticed that one of the hens, though always peaceable at other times, would allow of no love-making with her mate; so I made up my mind to put each pair in a separate pen if I tried to again. They had destroyed a number of nests, but one day I was much pleased to find an egg in the nest and this was followed up, at intervals of one or two days, by others, until seven were laid.

Now comes the sad part of it. On going to feed them one morning all had disappeared—three quail and seven or eight eggs. I found where something had dug under the pen and taken them all. I thought at the time it was rats, but it might have been skunks, for the fall, though I live in the centre of a place of about a thousand people, we are overrun with skunks; and I lost a beautiful golden pheasant by them, and have caught and shot a number.

Well, I felt very badly about it, but do not consider it a failure. I had no one's experience to help me and I learned two things—to make the pen vermin-proof and keep the pairs separate. Now I am watching the columns of the *FOREST AND STREAM* to learn where I can get some more quail, and if any of your readers who live in the quail country will send me a dozen or two I will be greatly obliged to them and will remit at once. JAMES WRIGHT.

E. M. Bird has recently bought a white muskrat skin.

HABITS OF SNAKES.

ZOOLOGICAL GARDEN, PHILADELPHIA, JAN. 13.

Editor Forest and Stream:

Some of the remarkable facts already elicited by a discussion on the habits of animals have been brought to light by the correspondence in your "Natural History" columns, on the question of snakes and sharks swallowing their young for purposes of protection. Now, it is always difficult to make a negative, particularly in the face of arguments from eye-witnesses as to what they believe themselves to have seen, but all analogy, and anatomy itself as well, presents the strongest kind of presumptive evidence on the negative side of this question.

Almost all of the snakes commonly found in this region are either viviparous or ovoviviparous, the most common of all and those most likely to be observed, are our garter and water snakes; the genera *Tropidonotus* and *Tropidocoronis* belonging to the former class and producing their young alive and fully formed. In these cases if the female is roughly disturbed within a short time previous to parturition, a premature birth will ordinarily take place, and the average individual regards animals belonging to this order with feelings of such rooted aversion that when a dozen or more little squirming reptiles issue forth, he is apt, during the search for the nearest stick or stone, or else not to pause long enough to observe very accurately from which extremity of the

mother the eruption takes place. It is stated further by experienced collectors and observers of animal habits under nature, that when young snakes are once hatched or born the mother leaves them to their own devices and pays no further attention to them.

The anatomical relations of the generative organs in the female ophidian are such that in laying a specimen open, a chance cut would readily lead a careless or inexperienced dissector to believe that the ovarium had an outlet toward the anterior end of the alimentary canal, and without following the exceedingly contracted oviduct leading in the opposite direction, the reptilian uterus would, in his eyes, be transformed into "a cavity evidently formed" to serve as a place of refuge for the young in time of danger. The only organ into which the young snakes could go, when swallowed, would be the stomach, and the solvent power of the digestive juices of the serpent is so great that it can hardly be considered possible that they could be exposed to its action, even for a short time, without receiving serious damage. The same reasoning applies in the case of sharks and other viviparous fish. But when we have witnesses who have seen both snakes and sharks in the act of swallowing their young, we can only suppose it to have been an abnormal act of cannibalism on the part of the observed, or a faulty act of perception on the part of the observer. People will occasionally see wonderful things, and perhaps a parallel case may have some value in this connection. In many animals which have a double vagina, the penis of the male is bifid at the extremity, and from this fact it has been and is still believed by many of the uneducated (and the writer was recently questioned as to the fact by one of the ordinarily educated), that when the season of love arrives in the opossum, the nasal apertures, in the female, are the parts specially devoted to the exercise of the function then indispensable, and in support of this unique idea, observers have not been wanting, who with their own eyes have seen the male and female opossum *in situ* in the astonishing manner above indicated.

In all nature, we may be permitted to believe, no homologue can be found to an organ specially devoted to the reception of offspring, for protective purposes after they have once been produced. The nearest approach to this would appear to be among the pouched marsupials, where the young for a short period before they are finally excluded from the pouch, by the mother, occasionally come out and return again on the appearance of danger. But in the peculiar reproductive process of these animals, the greater part of development takes place in this receptacle, and it is evident that they receive their nourishment and their return to it is a resumption of their natural position with relation to the mother, which must be maintained so long as development is incomplete, and bears no sort of analogy with the operation supposed to take place among snakes, and which will require much positive and authenticated testimony in its favor before taking place among the class of ascertained facts in natural history. ARTHUR EDWIN BROWN.

HABITS OF SNAKES.—Brooklyn, Jan. 12.—*Editor Forest and Stream:* As to the mooted question of snakes swallowing their young, I am prepared to say most positively that one species—the common garter snake—most certainly does so when surprised by an enemy. Several years ago, while hunting in the Catskill Mountains, I came suddenly upon a garter snake, but without being observed. Mother snake was crawling out for a short distance, and I was startled by nearly a dozen little reptiles, slowly crawling among the rocks. Advancing nearer to get a better view, I was astonished to see the old snake, immediately on seeing me, open her mouth to its fullest extent, into and down which the young ones scrambled like mice into a hole. When the last one had disappeared, Mrs. Garter made her way to a place of safety, as I had not the heart to kill her.

I have not the least doubt that the common brownish water snake of the Middle States, to my own knowledge, eats snakes, and eats fish. I once saw a large water snake, nearly four feet long, crawl out of a small lake in the Catskills with an eight-inch trout in its mouth. On gaining the bank it proceeded to swallow the fish, but upon my approach it dropped its prey and jumped into the lake. Picking up the fish, which was nearly dead and showing the marks of the snake's fangs upon its sides, I put it into a basin of water, whereupon it eventually recovered. Shortly after I put it back again into the lake, watching it until it swam out of sight. But now comes the strange part of my story. Several hours after, as I again approached the lake, what was my astonishment to see a snake, looking exactly like the first one, lying in the place from whence I had startled the other, and just preparing to swallow a large trout also. 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Cynis occidentalis var. *aler*,—all presented. One axle deer, *Cervus axis*; one *Emu*, *Dromaeus nova hollandia*; one sambar deer, *Cervus arnisialis*; two *Ambar* pheasants, *Thaumatococcus ambar*; two blue jays, *Cyanurus cristatus*—all received in exchange.
FRANK J. THOMPSON, Sup't.

ALBINO QUAIL.—Mr. Frederick Fair, of Cranbury, N. J., has a case of game birds, put up at least forty years ago for his father, and still in a perfect state of preservation. He has recently added to the collection a beautiful Albino quail, shot by him a year ago near Dayton, N. J.

A hawk, nearly jet black, five feet from tip to tip, was caught on Friday, near Hightstown, by D. Oakerson.

Fish Culture.

THE CENTRAL FISHCULTURAL SOCIETY.

[CONTINUED.]

MR. MILLER: We would like discussions upon the merits and demerits of this Iowa fishway law, the plea of this Iowa mill-owner and on Mr. Shaw's reply to him; also decisions of the different State courts upon this question, with citations of authorities, through the columns of *FOREST AND STREAM*.

MR. SHAW: There is no doubt about the constitutionality of the law; it simply needs forcing. You have placed obstructions in streams and prevented the people living upon them from drawing their fish food from the waters where it was placed for man before mills were thought of.

THE SECRETARY then read the following paper:

THE GROWTH OF CARP IN AMERICA.

BY FRED MATTHEW.

It is a well-known fact that when an animal undergoes a change of climate it seldom remains as it was before the change. It either improves or deteriorates and often quite rapidly. A case which illustrates the latter phase is that of the bullock, which, taken to India, loses the courage which distinguished it in the British Islands and becomes a complete coward. Other instances are recorded in the pages of natural history where room will now have to be made to note the fact that the carp, after transplanting to America, has grown to three times the size, in the same space of time, which it did in Germany.

I propose in this paper to give the rates of growth in different parts of our own country, compiled from correspondents in different States, and also the rate of growth in Germany, obtained directly from the most reliable fish culturists of that country, and think that this testimony will bear out my assertion regarding the increased rate of growth of our newly-imported food fish, which thus becomes more valuable than it was thought to be on its first introduction. The first witness I will call is Mr. Volney Metcalfe. He writes as follows to Prof. S. F. Baird, who thought the latter of importance enough to publish in *FOREST AND STREAM* of August 19, 1890:

KOSSE, LIMESTONE COUNTY, TEXAS, June 28.
PROF. SPOENRER F. BAIRD, United States Commissioner Fish and Fisheries:

Dear Sir—The German carp, sent Sam Bell and me last fall, are doing as finely as any one could possibly ask. * * * We put five of them in the tank (or pond) and fed all of them on corn bread and vegetables that had seed, such as tomatoes, squashes, etc., all of which they ate. They seemed to like the squash best and preferred it baked. Several of them seemed to be sick when they reached us, and died soon afterward; the remainder are now about four inches wide and four long. Corn bread is their favorite diet, and by feeding them at the same place every day they become accustomed to look for it. * * *

A gentleman from Tennessee, who signs himself J. H. D., writes to *FOREST AND STREAM* of August 20 as follows:

NASHVILLE, TENN., Aug. 6.

Colonel Akers, our Fish Commissioner, received last week from Prof. Baird, a quantity of German carp. Mr. Frank Green obtained forty of these little strangers to place in a pond on his farm near the city. He reports them having grown to five or six inches in length, and says that he has noticed an enormous number of small minnows in the pond lately. Can they be the product of the carp so recently placed there? At what age do they begin to spawn? Mr. Green says that there were a few mud-cat in the pond when the carp were put in it. Could it be that the minnows referred to were of that species. It would be a matter of interest to have an answer from the *FOREST AND STREAM* to these questions.

To this the editor replies:

There have been many reports of the spawning of carp which were distributed last year, and it is possible that yours may have done so. It is also possible that the young fish referred to are carp. It does not seem possible that they could be confounded with "mud cats." Send specimens to Prof. S. F. Baird, Washington, D. C., and then you will get positive information.

The rapidity with which this fish has grown in southern waters is something wonderful, and it is to be remembered that all the accounts of extraordinary growth so far have come from the South, proving the assertion that the warmer the water the greater the growth, or perhaps to say that the longer the warm season lasts the greater the growth is, would more nearly express it.

A Florida carp culturist writes Prof. Baird, and his letter was also published in *FOREST AND STREAM* of September 16, and drew out correspondence from Germany's foremost fish culturist, Herr von Behr, whose letter is given further on, as follows:

RIXFORD, FLA., Aug. 5.

PROF. BAIRD:
Dear Sir—It will doubtless be a pleasure to you to learn that the carp you furnished me with last November are doing finely. I mentioned on my return from Savannah with them that my pond was not ready for their reception, owing to the fact that there were many more black bass in it than I had supposed. I accordingly confined the carp in a pen at the side of the pond, giving them water through holes in the side covered with wire netting. A few weeks since I discovered that a portion of the wire had been misplaced and some of them escaped into the pond, and I then concluded to let them all into it, as I had nearly all the bass out. Their growth since that time has been simply marvelous. Many of them are ten or eleven inches long, and I feel certain they will spawn this fall. Will it be too much trouble for you to acquaint me with their habits? Do they bed, like some other varieties, when they spawn? I will add that they seem

quite tame, and come to the place where I feed them as quickly as a drove of pigs would come for corn, whenever they find I am there. I am confident they will prove a great addition to the food fish of the South, and I shall take pleasure in distributing them as soon as they propagate.

Very truly yours,

Geo. C. Rixford.

Mr. Rixford also writes to *FOREST AND STREAM* as follows:

It may interest some of your readers to learn that the German carp are thriving splendidly in our waters. Last November I received a lot from Prof. Baird, which I think were then from three to four inches in length. They are now from ten to twelve inches, and appear to make a visible growth from day to day. I think they are the greatest addition to our food fish that has ever been made.

That the carp makes rapid growth in the State of New York is attested by the following item from *FOREST AND STREAM* of October 4: "Mr. Geo. W. Hopkins, of Mount Sinai, Long Island, N. Y., received some carp last spring from the national carp ponds at Washington, through Mr. E. G. Blackford, Commissioner of Fisheries for New York, which were then about three inches in length, but by October 1 would measure from twelve to fourteen inches.

The same paper contains the following from Texas:

OFFICE OF THE FISH COMMISSIONER.

Austin, Texas, Oct. 4, 1890.

PROF. SPOENRER F. BAIRD, Washington, D. C.:
Dear Sir—I saw a day or two ago one of the carp sent me last winter (these fish were the young of 1879 and about three or four inches long when received); it measured twenty inches. I am inclined to think they spawned this last summer, for the reason that the pond is now filled with small fry, unknown before in the pond. Should it prove to be correct I will inform you. Respectfully,
J. H. DINKINS, Fish Commissioner.

An account comes from Georgia, which gives the largest growth attained by this fish in America. It must, however, be remembered that this is the first season in which the fish has had a good trial in the South, and also that these Georgia carp are measured late in the season, having an advantage of several weeks over those before received. It appeared in *FOREST AND STREAM* of December 9, headed "Astounding Growth of Carp," and says: "It is a fact that the carp has grown faster in America than it does in its original home; but the most wonderful story comes from Georgia. A gentleman in Macon sends Professor Baird the following slip from a local paper and vouches for its truth. It says: 'Yesterday afternoon Mr. E. Witkowsky, who owns the tannery on the old Confederate property, concluded to cut the dam and clean out the pond in order that he might introduce his new German carp. The pond contained a large number of smaller fish, and among them Mr. Witkowsky hoped to find his four carp which had been put into the pond last May. He found three of the fish, but to his astonishment they were by actual measurement twenty, twenty-two and twenty-five inches in length respectively. The fourth escaped through the cut in the dam. These carp were but two or three inches long when put in the pond and their growth is remarkable. They are now in the tank in the rear of their owner's store on Cherry street, where we saw them last night and where the public are invited to see them today.'"

The correspondence between Mr. Rixford and Herr von Behr, President of the German Fishery Association, alluded to above, I take from *FOREST AND STREAM* of Nov. 18, and consider it worthy of a wide circulation as coming from a gentleman who has devoted his time and money to promote fish culture as a means of producing food, with no thought of personal benefit to himself and who had known the carp for years. The editor prefaces the correspondence with these remarks:

The widespread interest manifested in the culture of this fish since its introduction by the United States Fish Commission is so great that we are certain that our readers will find the following letters from Mr. Rixford and Herr von Behr, the well-known President of the Deutsche Fischerei Verein, who has done so much for fish culture in Germany, of great interest.

Although we have many fish which excel the carp as a table fish, yet we believe that its introduction will prove of the greatest value in those portions of the country where the warm waters produce nothing edible, and that we could with more profit dispense with any other fresh water fish, outside of the whitefish of the lakes, than the carp, speaking from the fish culturists' and an economical point of view, for there is no fish which, in confined waters, will grow so many pounds of food as the carp, and its food costs little or nothing.

Its rate of growth here has exceeded that in its native land, and its introduction into American waters will prove to be worth a vast sum within the next ten years to our hog-eating farmers, who seldom get a fish dinner. With this preface we give the following correspondence:

RIXFORD, SUWANNEE CO., FLA., Nov. 1.

Editor *Forest and Stream*:

Your favor of the 23d of October, covering a very interesting letter from Baron von Behr, came to me in due season. It appears that I am indebted to you for this correspondence, as it was through the medium of the *FOREST AND STREAM* that the Baron's attention was drawn to my letter to Prof. Baird, which you published, and I cheerfully send you a copy of his letter for your use, as well as a copy of my reply, which you can use or not, as you deem best.

Geo. C. Rixford.

SCHMOLDOW, IN POMERANIA, Germany.

October 4, 1890.

My Dear Mr. Rixford:

It is after having read in *FOREST AND STREAM* of September 16 your letter about carp that I take the liberty of writing you some lines.

I have been receiving such manifold assistance from your countrymen in my fish cultural interests that I am glad to be able, perhaps, to assist you, though of course Prof. Baird will have furnished you with the most needed hints.

I dare not say I will do in the State of Florida. They are a fish liking warmth before all, and therefore retire, in my climate—Northern Germany—from October to May, into the deepest possible mud in the ground of our carp lakes and seem to slumber there in entire apathy. They spawn with us in May, June and July, the special time depending entirely upon the warmth of the water. We are of the opinion that they need for spawning something like 15 degrees Reaumur—about 60 degrees Fahrenheit. All this is rather superfluous for you, but now I may be able to give you good hints.

We put branches of different trees—evergreens or others—in the pond a short time before hatching begins, fixing one end of the branch in the soil, and leaving it swing in the

pond some six inches below the surface. As soon as the carp begin to spawn, they fix their glutinous—adhesive—eggs in innumerable quantity upon the branches we had put in; but, alas! at the same time Mr. and Mrs. Carp begin to eat eagerly their own eggs. It is only in consequence of the immense quantity of eggs they spawn that the carp is as plentiful as it is. But as for your country, which wishes to get quickly great quantities of young carp, could make no better arrangement than to take out, after seeding the branches covered with eggs, either these branches—transplanting them in a tub of water, in order that the eggs do not get dry—and bring them to a neighboring pond, quite empty of other fishes, or take out the old carp altogether from your spawning pond, and leave this alone to the young ones, which after a short time, will swarm there by many thousands, and very soon begin to take food of any kind, say cooked potatoes or bread. By giving bread constantly my children got our carp so used that they would come and eat bread from their hands. They get very tame, indeed.

The best plan is to have many ponds for the carp, all of them being arranged in such a way that they can be made entirely dry. That gives you the possibility of having the carp divided according to their ages—say of one, two, three or four years.

At four years they will grow in your climate to about ten pounds, easily. You know that in rare cases we have carp of thirty or forty pounds, while it is nothing unusual to have them up to twenty pounds. If you read German, or have anybody who understands this—my language—I could send you, by care of Prof. Baird, some books about carp, their breeding and nursing. You know that the Greeks (Aristotle) and the old Romans knew this. They came from Italy to Germany in the eleventh century—of course, by the monks, who were the great protectors of fishes.

In the ponds which contain your carp of two, three and four years, you will do wisely to keep with them a few voracious fishes as *Bass* (pike), or similar ones. This seems to prevent their desire to spawn, and therefore assists their quick growing. This principle is generally followed wherever we have large carp culture in Germany or Austria—Bohemia. Beware of having other fishes of a similar family in the same pond with your carp—the crossing gives very bad fishes, full of bones and of bad taste.

Now, this, my letter, may go. It reaches you, I hope you may find it of a little use. I wish to begin, I hope, your kind assistance from your countrymen, that I shall be very glad to be useful to you. Newspapers make now in a few weeks *le tour de monde*. Let everybody try to make use of them, and be of use through them to mankind. "Good-will to nations" is a beautiful duty. I subscribe myself,

VON BEHR,

President of the German Fisheries Verein.

RIXFORD, FLA., Nov. 1.

BARON VON BEHR:

My Dear Sir—Your letter under date of the 10th of October was forwarded to me through the courtesy of the *FOREST AND STREAM*, and reached me in due season. Allow me at the outset to express my hearty thanks for your kindness in writing me, as well as for the valuable information you have given. My carp, which are of the scale variety, continue to thrive splendidly and are a marvel to all who see them, especially those who saw them when I first procured them in November when they were only about three inches long, and who now compare them. Many of them are from fifteen to seventeen inches in length and six to seven inches in breadth. They show no signs as yet of going into winter quarters, coming for their food regularly, and I hope to be successful in carrying them through the cool weather without their resorting to the old habit. I find our natural ponds are not exactly fitted for them, as they are generally deep and not easily drawn off, with no visible outlet, or inlet. Small fish, such as minnows and perch, generally inhabit them, which were better destroyed, as they will likely feed upon the eggs. Turtles are also plenty, but we must do the best we can to destroy the pests.

Your information that the carp devour their own eggs was new to me and has suggested the idea to me that possibly at that time they need a different variety of food, and I shall about that time change it to one composed more of meat. At the same time I can protect the bushes on which they have deposited their eggs from their depredations by a wire fence. I expect they will spawn in the early spring, say March or April. I will be much obliged to you for any works on their culture that you may send me, as I have friends who will take pleasure in translating them for me, and the publication of them may benefit others who have the fish in other portions of the country. You will, I am sure, pardon me for the liberty I have taken in sending a copy of your letter to the *FOREST AND STREAM* for publication, as the information given will be valuable to many of its readers and will very likely be copied into many other papers, as the subject is one that is attracting much attention. Your allusion to the assistance that has been afforded you by my countrymen is certainly a compliment to them and I feel warranted in saying that, as in the past, they will in the future do all in their power to promote and strengthen the "beautiful duty," to which you have so pleasantly referred.

Allow me to subscribe myself, very truly yours,

Geo. C. Rixford.

While in Berlin last summer in charge of the Fish Cultural Exhibit of the United States, I obtained, by request of Prof. Baird, the rate of growth of the carp in that country from three of the prominent fish culturists there which, compared with the above rates, shows that the change of climate has increased its rate of growth here. Mr. Robert Eckardt, trout and carp culturist at Luebenchen, gave the following average:

Carp at 1 year 10 @ 12 centimetres = 4 1/2 @ 5 inches.
" 2 " 15 @ 18 " = 6 @ 7 1/2 inches.
" 3 " 18 @ 20 " = 7 @ 8 inches.
" 4 " 3 lbs.

Mr. Hermann Haack, Director of the Imperial Fish Cultural Establishment at Hueningen, answered questions as follows:

Carp at 1 year 1 to 8 inches
" 2 " 3 to 4 lbs.
" 3 " 13 to 3 lbs.
" 4 " 2 to 5 lbs.

Depending upon temperature and food.

In this connection it must be remembered that Germany has a cool summer, and as the carp grows, according to our best evidence, in direct proportion to the warmth of the water it will be difficult to believe that the accounts of its wonderful growth in America with its broiling temperature, most especially in our Southern States. A most convincing proof that it thrives best in warm situations is the fact that in Germany a carp pond received the condensed water from a low pressure steam

engine which frequently raised it to a temperature as high as 100 deg. Fahr., and the carp in it grew with surprising rapidity, astonishing the carp breeders who had ponds in that neighborhood.

The evidence as above given, taken with the fact that at the national carp ponds in Washington, D. C., a carp was taken weighing twelve pounds, which was one of the original lot put in by Mr. Rudolph Hessel, the superintendent, only three years before when it was only four inches long, I think shows that the fish in its new home has exceeded its rate of growth in its native land at least four times, for I have no doubt that in the cooler waters of its former home it would have taken twelve or fourteen years to reach that weight.

From the report of Mr. J. H. Dinkins, the Fish Commissioner of Texas for 1880, I take the following: "Last February out of a shipment of 150 carp from Washington I gave Mr. J. B. Rogers, living about twelve miles north of Austin, ten, averaging not more than four inches in length. While Mr. Ellis was here we rode out to Mr. Rogers for the purpose of getting a specimen to take back to Washington to show the extent of their growth. We caught five out of the pond in which they had been placed the February previous, and they varied from nineteen to twenty-two inches in length, and had increased from about three ounces to about four pounds in weight. The one taken by Mr. Ellis to Prof. Baird at Washington was twenty-two inches long, and I doubt if an example of more rapid growth can be found anywhere."

I am also informed by Mr. E. R. Miller, of the Michigan Fish Commission, that they received some young carp last year, none of which were over an inch and a half in length, and that when they had occasion to move them this year they found that they had grown up to October to a length of seventeen inches and a weight of three pounds.

[The remaining papers and discussions will follow as fast as we can publish them.]

SHIPMENTS OF WHITEFISH EGGS.—From the U. S. Hatching Station, at Northville, Mich., in charge of Mr. N. Clark, the following shipments of *Coregonus* eggs have been made. 250,000 to the Herricks Fischerei, Verden, which, according to a telegram received by their New York agent, Mr. Fred Mather, arrived safely; 50,000 to Mr. E. M. Stillwell, Bangor, Me.; 250,000 to Mr. Wm. Griffith, Louisville, Ky.; 500,000 to B. F. Shaw, Anamosa, Iowa; 250,000 to R. O. Sweney, St. Paul, Minn., and 250,000 to B. D. Redding, San Francisco, Cal.

Sea and River Fishing.

THE TROUT LAW.

THE following letter from one of the game protectors of the State of New York seems to us so sensible and to the point that we commend it to those having its revision under consideration:

Editor Forest and Stream:

I notice in your edition of this week an article on "The Game Law Revision," and I would say that it is a matter that now needs the closest attention. I am living in one of the best "speckled trout" regions in this State, and the present law reads, Sec. 10, Laws of 1879, Chap. 534: "No person shall kill or expose for sale, or have in his or her possession after the same has been killed, any speckled trout, save only from the first day of April to the first day of September," and then follows the penalty, etc. Now, you see from that section that unless the trout are killed, the party taking them is not liable. And we have two men near here that have private trout ponds and fish the year around, and put the trout into their ponds, where they sell them out in season for one dollar per pound. And during the past season I know of one party that caught and sold to one of these men six thousand brook trout, and they were mostly caught from a single brook that runs into the West Canada Creek. Those six thousand small trout were sold for \$2 50 per hundred, and by being fed up in a private pond, another season many of them will be large enough to be caught out at \$1 per pound, which looks to me all wrong, as this particular brook, with several others that are tributaries to the West Canada Creek, were stocked with trout from the State Hatchery two years ago, and if left alone would soon make fine fishing in the creek. And this is only one family and one brook out of a dozen that I might quote. You can readily see that it is a large drain on the main stream. And besides these fish ponds men can go and catch them off from the spawning beds, provided they catch them with hook and line, and do not kill them, all of which serves to keep the people living in those localities and who own the land through which the streams run uneasy and discontented, because these men are allowed the privilege of cleaning out the stream in or out of season.

I would suggest that that section be amended so as to read: "No person shall catch or kill," etc. That one word will stop the stocking of fish ponds out of season. And I believe it would be well to amend it still further by prohibiting entirely the catching of trout out of public waters for the purpose of stocking private ponds, for in every number of the great North Woods with copies of the game laws and, with few exceptions, they have expressed a willingness to stop depredations themselves and assist in enforcing the laws if it was going to become general. But the game law has been a dead letter so long that it has taken some time to convince them that the laws are going to be enforced, and that though parties may sometimes get through without being caught they are liable sooner or later to come to grief.

This particular flaw in the law has more trouble to me than any other. I have taken pains to supply most of the guides and resident hunters living on the edge of the great North Woods with copies of the game laws and, with few exceptions, they have expressed a willingness to stop depredations themselves and assist in enforcing the laws if it was going to become general. But the game law has been a dead letter so long that it has taken some time to convince them that the laws are going to be enforced, and that though parties may sometimes get through without being caught they are liable sooner or later to come to grief.

There is quite a mistaken notion among men calling themselves sportsmen, and who belong to sportsmen's clubs and are members in good standing, that if they are in the woods during the months of June and July on a fishing excursion and want a "little venison to eat while in camp" they have a right to kill it, but it will not do. It works harm to the general enforcement of the law to allow it, as guides and parties living back in these localities claim, with good grounds,

that it is no worse for them to "crust" deer for meat for their winter use than for these sportsmen (2) to kill them out of season for their use.

The season thus far has been quite favorable for deer. We have not had a very deep fall of snow as yet, and what we have is light and loose, so that deer can roam at will, and yet the snow is deep enough to prevent a dog from running with any effect and so light that snow-shoes are worse than nothing for any one disposed to try a "little still-hunting out of season," and until we have a thaw to make a crust the deer are comparatively safe from the poachers. There are some other sections of the game laws that I wished to speak of, but as I have already written this letter out to considerable length I will make them the subject of another communication.

Since writing the above we have had a terrible fall of snow, but it is so light that the chances for the deer are still in their favor, for a dog can't run at all and snow-shoeing is almost impossible, and until there is a crust they are comparatively safe.

WM. P. DODGE.

PICKEREL FISHING THROUGH THE ICE.

THE law has been changed in Chautauque County, N. Y., and the "snake-eaters" can now be taken in winter. The *Countrywide* complains of it and says that there are 500 fishermen's huts now upon the ice and that the crop is in danger of being over-harvested. Well, there are better fish, and all who are interested in pisciculture can well spare the long-snouts, for they kill tons of better fish than themselves. Our private opinion is that they are not eatable, although we often hear of localities where they are "excellent." This point we will admit, for other palates than our own; but, as for us, we admire not the flavor of mud and weeds combined in a soft paste.

A Campbell's, Mass., correspondent writes: "Nippenickett Pond, some four miles from this place, has become noted for its pickerel fishing through the ice, and last month large quantities of them were taken. A party of three from this place caught some eighty or ninety in an afternoon, weighing from one-half pound to three and a half pounds—not great fishing, surely, but it shows what our ponds might do if protected."

And "Wah" writes from Nashua, N. H.: "Pickerel fishing has not been as good this winter as usual, though some good strings have been taken. The outlook for trout fishing in these parts for the coming summer is poor. Some, if not most, of our best trout brooks were dry all the fall and of course no spawn were cast in them. Many trout were destroyed in pools, where they had congregated, by their enemies, the kingfisher, the heron and hawk; others were left to decay in the dry beds of the streams. The Commissioners would, perhaps, furnish young fry to re-stock the streams, as far as they could, if parties interested should apply."

THE NORTHERN RANGE OF THE CATFISH.

ST. PAUL, Jan. 1.

YOUR correspondent, Dr. E. Sterling, of Cleveland, O., is "in search of the most Northern range of our catfish." He suggests "perhaps the waters of the Mississippi will be found to carry this fish furthest in that direction." He calls for information as follows: "In case it is found in waters north of the divide, that flow into the Arctic seas, please let us hear from the captor," etc.

The Red River of the north flows into the Arctic seas. In the month of August, in the year 1860, the writer was one of a party of eight or nine persons who made a trip from St. Paul to the mouth of Red Lake River, a place on the Red River, now the site of a flourishing city called Grand Forks, some sixty miles south of the boundary line between the United States and Manitoba. The whole country was then a wilderness. The object of the expedition was to make a treaty with the Red Lake Chippewas, and the Commander-in-Chief was one Goddard Bailey, special commissioner, who soon afterward became somewhat notorious in connection with certain securities misappropriated at Washington belonging to some of the Indian tribes.

Major Wm. J. Challen, well known to all old settlers in the Northwest, was the most genial traveler and companion in the world, then superintendent of Indian Affairs in this department, was "high joint" with Mr. Bailey and accompanied the expedition. The writer was secretary to the commission. The treaty failed but the catfish question was settled.

At one of our camps, at a point on the Red River near the present crossing of the Northern Pacific Railroad, our cook set out a hook and line properly baited with a pork rind, and in the morning a catfish was found on the hook and secured, the weight of which, in the judgment of the party (we had no scales), was at least forty pounds. After slicing off enough for breakfast for the party, our cook, having no convenient place in his wagon for such a monster, hung him with a chain under the wagon reach and toted him along, and we fed on catfish for several days and found it delicious.

God-ford could make a better fish food than the Red River catfish, but he doubtless never did at least that is the way it struck the party who consumed this one. The Red River catfish, if this was a fair specimen, is vastly superior in flavor to those found in the waters of the Mississippi. The writer is not very familiar with the habits of the Red River half-breeds whose log cabins adorn the banks of this river between Pembina and Winnipeg, but he understands the fact to be that the catfish of this river are their main stay for food, and contribute in good part to make them so fat and lazy. Take a trip down that stream by steamboat on any summer day, and you will see their lines bobbing from every branch overhanging the water, all the way down. In this section of the country these facts are notorious. The Doctor evidently has not traveled this way.

CLEVELAND, O.—The inclosed postal card gives you another item on the range of the catfish (*Pimelodus*). I have information from a reliable source that the fish is taken in the Bay of Superior City, and also near the mouth of the St. Louis River at the head of Lake Superior; the fish often weighing twenty pounds or more. Taken in such cold, clear water it must prove a very superior fish for the table, especially when cooked according to Dr. Kirtland's way. This fish from Lake Erie when salted brings two dollars more per barrel in the Southern market than our much valued whitefish (*Coregonus*). The catfish can be easily propagated artificially. Have any of your readers any way to save in favor of this fish?

DR. E. STERLING.

FORT OMAHA—*Neb. Jan. 2.*—The Missouri River is full of catfish, to my knowledge, as far west as Fort Buford and the Yellowstone west to Tongue River.

W. L. CARPENTER, U. S. A.

WINCHESTER—*Vt., Jan. 4.*—In reply to the inquiry of Dr. Sterling in your last issue I have to state that more than a score of years ago while stationed at Fort Abercrombie on the Red River of the North I was accustomed to capture many of these fish. They were of a golden color, rather slender than the common catfish. Their flesh was white, firm and of most delicious flavor. As the R. River connects with Lake Winnipeg I think it probable that they may be found as far north as the latter point. LIEUT. ASA WALL.

A NEW FISH MARKET FOR NEW YORK.—The Times gives over a column to the history of the efforts to abolish the rickety old Fulton Market and build a respectable one on its site. It has at last been accomplished and \$80,000 granted by the city for this purpose, news which all fish culturists who look there on April 1st to see the trout show will appreciate, although it will not be begun until after the next one. The old building has been condemned by the Health Department several times, but the opposition of the politicians and small stand holders has, until now, proved too strong for them. The new building is thus described by the Times:

"The cellars, grog-shops, etc., are all to be filled up. New walls 31 feet high and 34 feet apart are to be erected. The central portion is to be made perfectly secure, but for the present the internal arrangement will not be disturbed. As the market exists to-day, you have to move a series of dirty wooden stairs to approach the centre of the market, which you have to descend again. With the new plan there will be a continuous ground floor and no stairs. The greatest care will be taken as to drainage, and every possible convenience will be presented for the washing or flushing of the floor. There will be plugs of water at proper distances. There will be a truss roof over the new portion. The floor will be two-inch-thick yellow pine laid in air and caulked. There will be three entrances on Front street, with one on Beekman and one on Fulton, the South Street front from the two wings of the market, will remain as it is now, open. On each corner of Front street the building will rise above the level of the roof. For ventilation there will be ample provision by means of spacious windows. It is proposed that the demolition will begin some time from the 1st to the 15th of April, and the new building, it is expected, will be entirely finished and ready for market purposes by the middle of August. A number of the leading stand-holders, among them Mr. E. G. Blackford and Mr. William Ottman—these present premises being situated on the site of the proposed improvements—are ready to spend a great deal of money in embellishing and fitting up the interior of the market in a manner appropriate to their business. Certainly the trout exhibitions made heretofore by Mr. Blackford, of New York State Fish Commission, will be doubly attractive when they have these newer surroundings in 1892. In regard to the central portions, they will in time, perhaps not later than 1892, be reconstructed in harmony with the rest of the building."

"New York is to be congratulated at last in having this offensive nuisance torn down and an appropriate structure erected in its place. The committee are to be lauded for their energy and determination in having the old eye-sore removed, and most especially the thanks of New Yorkers are due to Mr. E. G. Blackford, who has for the last year devoted his whole time and efforts in this direction."

Game Bag and Gun.

[SPECIAL TO FOREST AND STREAM.]

MICHIGAN SPORTSMEN'S ASSOCIATION.

LANSING, Mich., Tuesday, Jan. 25.

THE Michigan Sportsmen's Association met in this city this afternoon. The purpose of the organization is the protection of fish, game and birds. It comprehends a large number of local societies and has individual members in all parts of the State.

The present meeting is very largely attended, exceeding in that respect any previously held by the Association. Large delegations are present from Kalamazoo, Saginaw, Battle Creek, Iart, Jackson, Bay City, Grand Rapids, Detroit, Monroe, Hastings, Grand Haven and other points. Dr. E. S. Holmes, of Grand Rapids, is President; Prof. H. B. Romney, of Saginaw, Secretary. Many individuals were elected members, and four new clubs were admitted—the Hastings, Grand Haven, Bay Point and Iart Clubs.

Letters were read from gentlemen from Georgia, Wisconsin, Illinois, Indiana, Ohio and New York, interested in the preservation of the game of the country, and hopeful of the passage of such laws in all the States as will fully protect migratory birds and fishes. At the evening session a paper was read from Seth Green, the noted pisciculturist. He regretted that the New York State Association was chiefly given to shooting rather than to conserving of game. He gave as his opinion that the game of the country would soon become extinct. He urged better legislation and spoke of the good effects of having a game constable in the vicinity of Rochester, and hoped that angling with rod and line would be made lawful in streams inhabited by game fish.

A report was read by the Committee on Laws for the protection of game animals and birds and insectivorous birds. It was accompanied by the draft of a bill. The Committee on Fish Laws, including propagation as well as protection, made a report confining it chiefly to the waters of the great lakes.

A letter was received from Professor Spencer F. Baird, of Washington, who doubted the jurisdiction of Congress over the waters of the lakes for the purpose of regulating the fisheries therein. He thought that the object might best be attained by State legislation. Chairman Clark advocated laws making artificial propagation of fish obligatory.

Letters were received from gentlemen at Menominee requesting legislation that would prohibit the digging of pits for entrapping deer and of firelight shooting.

The report of the Committee on Sporting Dogs favored legislation that would protect such animals. The report also took ground against summer shooting, and abounded in suggestions as to the proper season for various birds. A letter was received from Mr. Hyatt, of Fond du Lac, Wis., regretting that poachers had begun to make ruthless raids on the hunting grounds of the Upper Peninsula. He thought that five thousand deer must have been slaughtered there last season, and hoped the open season would be shortened by the Legislature.

Secretary Roney read his annual report, in which the growth and prosperity of the Association were adverted to and certain legislation recommended. The session continues to-morrow, and a large number of papers by distinguished sportsmen will be read.

THE GAME OF MAINE.

FROM the advanced sheets which have been furnished to the FOREST AND STREAM through the courtesy of Mr. Everett Smith, we take the following extracts from the report of Messrs. Stillwell and Smith, Commissioners of Fisheries and Game of the State of Maine:

All game (*Pere nature*) is the property of the State within which it exists. And no person has a legal right to pursue or take it, except by the means and at such time as may be permitted by the laws of the State thereto pertaining.

By an act of the Legislature, approved March 9, 1880, it became the duty of this department to enforce the game laws, as well as the laws relating to our fisheries. The list of prosecutions was in some respects, the most energetic efforts in the discharge of our new additional duties, and we hope to receive the support and assistance of our citizens and sportsmen in the continuance of this work each year. Our citizens are awakening from their apathy in regard to our fish and game laws, and the general desire for a vigorous enforcement of them, calls forth the support and assistance needed, and without which we can do but little.

GROUSE.

We wish to call attention to the work of extermination, practiced by parties engaged in snaring grouse or "partridges." Very few of our citizens are aware of the extent to which snaring is practiced, and, although the grouse are nearly exterminated in some of our districts, the public are at a loss for a cause to which it may be ascribed. The practice is carried on so secretly that it is often known only to those engaged in it, and perhaps those to whom the birds are sold. It often happens that many broods of grouse are observed in some locality during the summer, but when sought for in the mellow days of October but few, if any, can be found. Since summer woodcock shooting has been prohibited by law the grouse have increased in numbers, and are now being killed before September 1, and he who goes to the woods with gun and dog in July and August becomes an object of suspicion, while the sound of a gun is *prima facie* evidence of a violation of the law. We warn sportsmen who may take young dogs out for training, to leave the gun at home, if before September 1, lest they incur the odium, at least of being suspected of poaching.

WOODCOCK AND SNIPES.

Although the spring was very favorable to the breeding of woodcock, the almost unprecedented drought that extended well into the autumn, and past the usual rainy season of September rendered the earth so parched and dry that the customary resorts of these birds yielded no food, and they were thus driven to seek other feeding places. Usually the woodcock remain throughout the summer in the vicinity of their breeding places, and, after moulting, collect in the coverts that are their favorite resorts. But this year the coverts have comparatively been almost deserted, the birds having scattered over the country, along the banks of streams and shores of lakes, the edges of meadows, and places where they have not been observed before. Reports from Canada show that woodcock were exceedingly abundant in the autumn, and places that usually have afforded but little shooting, seem to have been thronged with birds. This has been true, also, of snipe, which were sought in Maine from the same causes that occasioned the scarcity of woodcock; the meadows and marshes being very dry at the time of the usual appearance of the snipe during the autumn.

As is usual after a poor season, many of our sportsmen discuss the advisability of restoring the old law, permitting woodcock shooting in summer. We trust that this will never be done, for it would open the door to a slaughter of young grouse, and, most certainly, four months' shooting at woodcock, instead of two months, will not serve to increase their numbers.

Since Maine abolished summer shooting other States have done likewise, and with good results; and we hope that all other States will follow the example.

It is true that ten years ago one could shoot more birds as the result of a day's shooting in Maine; but there are now ten or twenty times as many persons hunting woodcock as then, and all the best coverts are hunted through almost daily during the whole season. Hence the birds are subjected to collect in numbers, but the aggregate number killed each year far exceeds that of the years before summer shooting was prohibited.

DUCKS.

It will be remembered that within ten years the ducks that frequent our lakes and streams gradually became scarce, and

*The appropriation of 1880 was for the "propagation of fish."

even exterminated in some localities where previously accustomed to breed. This scarcity was owing to extensive netting, but the perpetrators were driven off for a time, and the ducks increased, until they regained their former abundance last year.

It has recently come to our knowledge that the same causes of extermination have been in operation this year, and we call especial attention to the fact. We intend to publish in the future the names of those who persistently violate the fishery or game laws, and we now brand as a professional poacher and persistent violator of our laws, Daniel Y. McFarland, of Lamoine, Me. This man, with his associates, has been engaged in the business of netting ducks for many years, and we not only call upon all good citizens to aid in forcing him to abandon this illegal pursuit, but warn the citizens and officers of the law in other States, and our Canadian neighbors, that the operations of this man are not confined to Maine alone. He is the leader of a gang of poachers whose operations a few years since bade fair to exterminate all the wood ducks and "black ducks" that bred in the State, and he has been operating again upon an extensive scale in Maine within the present year. He is wanted in Maine to meet the justice that awaits him and the heavy penalties that he and his associates have incurred.

QUAILS.

It is quite generally known that a large number of quails were imported from Europe this year, and liberated at various places in the United States and Canada. More than one-half of the total number were distributed in Maine. These birds were purchased by private subscriptions, but as they have now come under the protection of our department we give this mention of them, which may prove of interest to our farmers and sportsmen.

This quail, *Coturnix communis*, is the common migratory quail of Europe, that for centuries has crossed the Mediterranean sea from its winter home in Africa to its breeding places throughout Europe, returning again to Africa in the autumn. The bird resembles in outward appearance our American partridge, *Ortyx virginianus*, that is termed "quail" in New England. The migratory quail is one-third smaller, and the throat of the male bird is marked with dark brown or black, that extends from the bill downward. The note of the quail may be expressed as nearly as possible to translate into words or syllables, by "who cat—cheek—cheek." The common quail "who" not being heard at a great distance, but the three clear notes may be heard a quarter mile away. Often the notes seem to come from a bird near by, but really far off, and perhaps in another field not near the listener.

The quail is strictly a terrestrial bird, and inhabits the fields, where it also nests. Fifteen eggs to a nest is not an unusual number, and as each egg, laid by a bird of but three or four ounces weight, is as large as the egg of our robin, we have been frequently observing and how few small birds manage to hover and hatch so many eggs in one nest.

The nest is a depression hollowed in the ground, and lined with grass by the bird. In this nest are laid the eggs in regular order, upon the bottom and around the sides of the nest, the upper ones supported by the eggs beneath and the sides of the shallow, bowl like nest. While sitting, the body of the bird is surrounded upon breast and sides by the eggs, while its wings are raised to cover the top layer of eggs upon each side. Many nests of these eggs which have been reported as found, and all the eggs were hatched.

One nest of eighteen eggs deserves especial mention, as of interest to students of ornithology. The eggs in this nest were laid in tiers or layers most carefully and compactly arranged, one above the other, as if placed by the hand of man, the bottom layer most entirely hid from view by the eggs above. But twelve of these eggs were hatched, and evidently the bird was too ambitious. Probably the bottom eggs were so crowded by others that not sufficient warmth was imparted to them from the body of the bird.

The eggs of the quail are of a greenish color, profusely blotched with brown. Like other eggs, if deserted and left exposed to the sunlight for days, the color will fade until it becomes almost white. This year the eggs were laid in June and hatched in July. The young birds leave the nest as soon as hatched, and mature very rapidly, being strong of wing in September.

Among the noteworthy characteristics of the quail are its gentleness, and the extreme pugnacity with which it adheres to its domestic duties. We found two nests with eggs within a few rods of a farmhouse, where a lot of the birds had been liberated, and close by a traveled highway, as well as near a railroad. The birds were occasionally observed among the chickens about the house.

Quite a number of quails have been killed by mowing machines. One mowing man naturally suppose that the clatter of one of these machines approaching would sufficiently alarm any bird, even while sitting upon its eggs, to cause it to leave its nest temporarily. But some have had their heads cut off by the knives, and in one instance the machine was a typical "Juggernaut," the wheel passing over and completely crushing the quail and its eggs in the nest beneath it.

The quails have a strong scent, readily detected by setters and pointers, but they often seek to escape by concealment, or without taking flight. They are fast runners, and in a field trail on these birds under the present system of awards and demerits, the dogs possessed of the finest "nose," or scenting powers, would be handicapped, and receive a score of demerits for false "points," as it would not infrequently occur that the bird or birds, would not be flushed before the dog, although there when the point was first made.

Some young quails were captured near St. John, N. B., this year, although none were liberated nearer than St. Stephen. Several quails were also seen near Machias throughout the summer and autumn. None have been liberated nearer than the Penobscot valley on the west, and at Calais, forty miles to the east. This is not remarkable, however, in consideration of the fact that a quail can easily fly fifty miles within an hour. Unlike our American partridge, or "quail," it is capable of long sustained flights, without stopping to rest.

Quails live upon the ground in open fields, and feed upon seeds and insects. Farmers should be interested in protecting these birds for propagation, and public attention is called to the special law for their protection:

"No quail shall be killed, or had in possession except alive, any time previous to September 1, 1883, under penalty of \$25 for every offence, and \$1 additional for each quail killed or had in possession except alive.—Chap. 139, Public Laws 1880."

The general law of the State provides for their protection after the expiration of this special law.

CATS.

We mention cats, not as game, but as the most deadly

enemies to our feathered game and song birds. Many instances have been already reported of quails caught by cats, and the unsuspicious nature of these birds render them an easy prey to the feline marauders. One cat is reported as having been seen to return home with six quails in the course of a few weeks during the nesting season. Of course one can only conjecture how many that cat killed and ate without being observed by any one. Another cat was seen to bring home three woodcock.

But although the cats commit this havoc among our game birds, by far the greatest evil caused by them is suffered by the farmers, to whom a cat is a costly pet. All through the spring, summer and autumn the cats venture out from their holes, to seek their favorite food, and the birds, and the loss of care and food will not keep them from doing this. One may frequently see them crouching by the roadside or skulking along a hedge or ditch, seeking not for mice but for birds, destroying the mother bird setting on its nest and the fledgling birds. Now do the farmers realize the evil results to them caused by the death of these birds? We think not and would therefore call their attention to what is really serious evil.

Excluding the hawks, and other rapacious birds, all our birds are insectivorous in their habits, very many of them subsisting wholly upon insects and their eggs, of which a single bird will consume an immense number daily. But for these birds the face of the earth would be made desolate by a scourge of insects. As the birds about a farm destroy millions of insects every year, it behooves the farmer to afford all possible protection to these birds that render him such valuable service. There is a sufficient number of natural enemies to the birds to preserve the balance of nature and prevent a too great increase of birds, and the domestic cat has been introduced by man and by him should be removed.

The mischief that might be done by all the rats and mice caught by the ordinary cat in the course of the year would be but a trifle as compared to the evil results possibly due to the destruction of the birds. We urge our farmers to kill the cats. You cannot afford to keep them, unless it be in confinement constantly, except while the snow is on the ground and nearly all our birds are dead. Every single bird killed by them grates life to many thousands of insects.

MOOSE, DEER AND CARIBOU.

The law prohibiting the killing of moose, at any time for five years, expired October 1, 1880.

Unfortunately, violation of the law deprived the State of the full benefits for which it was enacted, yet the moose has increased in numbers within the period named, and we trust that the examples made of several offenders brought to justice, and the penalty of \$160, for each moose killed or had in possession, may deter others in the future from so offending. Caribou are much better able to take care of themselves. They can travel rapidly and for long distances in the deepest snow, and owing to their roving habits they are perhaps plentiful in a given locality one year, and none at all observed there the next year.

The violations of the laws protecting deer have gradually become better observed, and deer have increased materially in the eastern portion of the State. Unfortunately the laws of New Hampshire do not conform with those of Maine, and many deer are killed along the border during the summer months. There seems to be an apathy among the people in that portion of our State, and there have been repeated violations of the fish and game laws, without any apparent attempt at concealment, yet no one has been public spirited enough to enter a complaint. We hope for a speedy change in that region.

We are opposed to constant changes in the laws, as experience has shown that they too often tend to make confusion, and render enforcement more difficult. We therefore recommend but a single change in our game laws, and that change such a one as will, we believe, render the law more simple and effective.

We have alluded to the desirability of uniformity in regard to close-times. The season for ducks, woodcock and grouse or "partridges" opens September 1. We recommend an amendment to the laws for the protection of moose, deer and caribou, that shall make the open season conform with that of grouse—September 1 to December 1.

September is the month when our forests are most frequented by hunters, or those in quest of health and recreation. It is very difficult to prevent one kind of game being killed then where it is lawful to kill other game, and deer are then in prime condition, and their young no longer dependent upon the doe. In New Hampshire the season opens August 1, but we regard this as too early for this latitude. Our present law makes the open season from October 1 to January 1. The change recommended gives no longer time for killing deer, but it cuts off the month of December, giving September instead. It sometimes occurs that the snow lies deep in our forests before January 1, and occasions are sometimes offered when the increase of years may be slaughtered in one season during the month of December.

COMPLAINTS AND PROSECUTIONS.

Complaints for violations of the fish and game laws may be made to any warden, whose powers and duties are here given. All such complaints should be accompanied by evidence, or such information as will enable an officer to obtain the evidence necessary for prosecution and conviction.

LAWS RELATING TO PROSECUTIONS, ETC.

"An act to enlarge the powers and duties of the Commissioners of Fisheries and Wardens.

Be it enacted, etc., as follows:

Sec. 1. The powers and duties of the commissioners of fishery and warden, shall extend to all matters pertaining to game, and they shall have the same powers to enforce all laws pertaining to game as they now have in enforcing the laws relating to the fisheries.

Sec. 2. The Governor is hereby authorized, with the advice and consent of the Council, to appoint wardens, whose duty it shall be to enforce the provisions of all laws relating to game and fisheries, arrest any person violating such laws, and prosecute for all offenses against the same, and to their knowledge, and shall have the same power as sheriffs and deputy sheriffs, to serve all criminal processes for violations of the provisions of any law pertaining to game and the fisheries, and shall be allowed for such services the same fees as are prescribed by law for sheriffs and deputy sheriffs, and the execution of their duties they shall have the same right to require aid that sheriffs and their deputies have in executing the duties of their office; and any person refusing or neglecting to render such aid when required shall forfeit ten dollars, to be recovered by the State before any trial justice or municipal court. Chapter 298, 1880."

GAME LAW VIOLATIONS.

The following named cases have been brought up, and there are others in the hands of the officers, but not yet settled:

April 16, 1880. Killing one deer in March, 1880. Penalty \$40. Fines and costs paid.

re-l up my line, disjoint my rod and ply the paddle homeward; and when the string of "lusty trout" are weighed the very scales groan under the weight of nineteen pounds.

DUCK SHOOTING.

Still another variety of sport can be enjoyed on the island, that of black and wood-duck shooting. These fowl, though not strictly abundant, can be found in numbers sufficient to warrant a fair day's bag. True, the pursuit of them is productive of both toil and fatigue, but to the indefatigable sportsman who seeks the field with the intent of animating the senses, invigorating the body and communing with nature, it is a matter of secondary importance, and to him also is *me, iudice*, the name and honor of a sportsman.

And now my tale is finished, and should these lines ever meet the eyes of my good friend—who, alas! is now separated from me by a mile—I have only to add that his jovial ways and sweet companionship shall always have at least one spot ever fresh and verdant in the memory of his fellow-sportsman.

H. W. A.

DUCK SHOOTING AT SHINNECOK.

Editor Forest and Stream:

In your number of Jan. 20, 1881, you publish a communication from "Shinnecock" in which he takes exception to the suggestion made by Mr. Pike in his speech before the Long Island Sportsmen's Association. He says "that Shinnecock Bay is not adapted for point shooting."

To any one acquainted with the bay, and many of your readers doubtless are, that statement seems unwarrantable. For here, between Quogue and Southampton, many fine points, notable among which are Pine Neck, East and West Ramapo, Hole-in-the-Wall, and the east and west points of the big bar. I speak of these particularly, because I have shot from or near them all, and have had fine sport in the days gone by. I recall the first time I ever shot on Shinnecock Bay; it was in the spring of 1876. Batteries were not so numerous then as now, and the shooting was much better. I shot my first day for a week, and each day had good sport, securing a fair bag. The birds fed near the shore and came to stool gently, but since that time the shooting has become gradually poorer, until last fall it amounted to nil. I spent a week there, and between the three days' law, the adverse weather and the scarcity of birds I came very near being "whitewashed."

The open season for fowl shooting on Shinnecock Bay commenced last October 20, and for about ten days the birds were plenty and gentle. They gave fine shoot days, which was ample time to disgust them with batteries and the use to which they were put. I will cite my own case. My gunners were anxious that I should have good sport, but no more so than were other gunners for their sportsmen, consequently there was a great rivalry as to who should secure the best places where the ducks live. The result of the rivalry was that the gunners with the batteries would start out at midnight to secure the ground for the next day. The whole of the flats from Southampton to Quogue at intervals were occupied that way, driving up the fowl during the night as the time when they do most of their feeding. I ask, what chance had ducks to feed under such circumstances, and if they cannot procure food, what object is it for them to stay? They certainly have to feed and will go where they are not disturbed at night, which is their natural feeding-time. If you will allow me the space I would like to quote from "Wilson" in support of my views. He says on page 312, "Vol. 3," "American Ornithology," speaking of the black duck: "In the evening they resort to the muddy flats and shores and occupy themselves throughout the greater part of the night in seeking for food." Again, on page 342, same volume, in speaking of the canvas-back, he says: "But of all the modes pursued, none intimidate them so much as shooting them by night and they soon abandon the place where they have been thus repeatedly shot at." Again, on page 355, same volume, in speaking of the scaup, or broadbill (which is the most numerous duck on Shinnecock Bay), he says: "When disturbed by the fishermen along the Jersey shore, in the spring, they resort to other feeding-places."

Giraud, in his "Birds of Long Island," on page No. 323, says of the scaup, or broadbill: "It passes the night on the flats in large flocks." The nature of wild-fowl to-day is the same as it was in the days of Wilson and Giraud and as they would not remain then on waters where they were disturbed night and day, neither will they now. For my own part, and on behalf of my brother sportsmen with whom I have conversed the subject, I should like to have batteries abolished from Shinnecock Bay, but as I am willing to give an equal chance to all, I would suggest, as a compromise, the following:

1. Abolish the three-days law.
2. Pass a law that no battery shall be placed more than twenty rods from the nearest shore; and,
3. That no battery shall be rigged and anchored on the shooting-grounds until one hour after sunrise and must be taken up at least thirty minutes before sunset.

If such statutes as the above were passed, we would once more see the shooting as it was. WM. DUTTON.

OUR PHILADELPHIA LETTER.

FOR the first time in many years I noticed a quantity of sharp-tailed grouse for sale in the street last week. The party who was selling them did not know but that they were prairie chickens, and called them such. The very severe weather we have been having the past three weeks has enabled game dealers in the West to ship many prairie chickens by express, and they are in great demand. I saw also numbers of ruffed grouse being offered on our main thoroughfares by peddlers or "street-hawkers." These birds have the appearance of having been snared. You know our Pennsylvania law prohibits the offering of many varieties of game (among which is the pinnated and ruffed grouse and quail) after January 15. This may in a measure account for the great quantity noticed everywhere, dealers being anxious to get it off their hands before the date of the law's taking effect. Some of these peddlers of game don't being questioned state that they will offer prairie chickens and birds not native of this State after January 15, stating that the law will not "hold water" if tested, except as relating to our own game. And yet the law distinctly names the several varieties of grouse, and imposes a penalty on their sale after the above mentioned date.

Our enterprising restaurateur, Lauber, had two enormous wild bears hanging behind his door this morning. These animals were shipped to him from Germany, advantage be-

ing taken of the cold weather. They are to be served up for those who will partake.

It must give those interested in the preservation and protection of game much pleasure to note the anxiety shown by sportsmen on the subject, which is now mainly evinced by the numerous articles in your last edition of *FOREST AND STREAM*. It is a good work, Messrs. Editors, a truly good work, and as the organ of the sportsmen of the country your journal should champion the cause. To illustrate that the severe weather we have experienced, and which has proved most disastrous to birds of the gallinaceous order, as I surmised early in the winter, has damaged the game of the South, read the following from the Columbus (Ga.) *Enquirer-Sun*: "A negro, while hunting in Perry County, Ala., a few days ago, came upon a covey of twenty-four partridges, which he proceeded to pick up one by one and put in his bag. They were well frozen and unable to fly." This is but a single case. How many just such incidents have occurred in the Eastern and Middle States?

Certainly there should be no trouble in having a ready response to a call by *FOREST AND STREAM* for a convention of sportsmen of the East to take some steps regarding a cessation of the hunting of ruffed grouse and quail for at least one year, if not two. I know there will be an outcry against such a movement on the part of some dog breeders, who depend entirely upon the sale of their animals for a livelihood. This will be seen at once, indeed it is already shown by one or two articles I have read. It was only to-day I heard an inquiry from a gentleman living in Chester County for live quail which he desired to keep in his barn through the winter and liberate in the spring. "For," said he, "in our section of the country we have not one covey left; the birds have all perished." The subject cannot be agitated too much, and an effort on the part of *FOREST AND STREAM* to lead to a call of general interest in the cause would doubtless meet with success. We have doubts that it will be found difficult to obtain live birds in any great numbers from North Carolina, as reports from that State show the quail has suffered there likewise. Let me repeat, such an undertaking on your part will be as laudable as your *expose* of the nitro-cellulose Dittmar powder.

The County of McKean, of Pennsylvania, is now our best region for deer, especially in the Sinnemauchung section. Our mutual friend, Capt. A. Clay, who resides in the locality mentioned a portion of the year, could relate interesting hunts participated in by himself and friends.

HOMO.

BUFFALO EXTERMINATION.

Editor Forest and Stream:

Let me say a few words on a subject to which attention has been called several times in your paper, namely, the wanton destruction of buffalo. That they are rapidly approaching extermination is abundantly proven. The action of the Game Protective Association of Wyoming testifies to that fact. The letter of W. A. Allen, of Montana, in your issue of December 23, says: "We found parties killing them for the tongues alone, not even taking the hides."

Let me give the results of my own observation. In the spring of 1876 I went from Dodge City, Kansas, across Indian Territory and into the staked plains of Texas. The herds which we saw were very small, none numbering more than four hundred; few were nearly so large. An officer of the expedition, Capt. H. H. Hays, who resides in the country a little more than two years before in pursuit of some Indians, told me that so large were the herds there that it was necessary to halt the cavalry and fire into the herds, in order to break them up and scatter them, so that the column of cavalry might pass through. In 1876 the few remaining ones were so wild that they fled precipitately before us, and when it was necessary to kill them for the meat we were compelled either to use the utmost caution in approaching them, or else ride them down and fire upon them from horseback. The same officer told me he thought that in his first expedition there were ten where one was found in the second.

Upon all sides we found hundreds of carcasses bleaching in the sun. In one locality, where they were most abundant, the crack of the rifle was heard everywhere. Our nostrils were constantly offended by the stench of decaying bodies that almost literally covered the plains. Of course these were killed for their hides, but the inevitable result, extermination, will surely follow unless some limit is put to the numbers killed. It is generally the idea of the enormous numbers killed, it is only necessary to say that in one year three hundred thousand hides were shipped from Dodge City, Kansas.

When the two railroads that cross Kansas were opened it was not unusual to have to stop the trains till the buffaloes had crossed the track. Now a buffalo is never seen on either one of them. And this is not simply the result of advancing civilization; it is the direct consequence of the merciless war which has been waged against them, and unless something is done to prevent it, the day will soon come when this characteristic American animal will be one of the things of the past. Cannot something be done to put a stop to this wanton destruction? Is there not some action which could be taken on the part of the General Government that would do something toward the preservation of the bison? It will not do to plead that the hunters make a living by their hunting. The same amount of time, labor and energy (and a much less amount of exposure and hardship), expended in nearly any other direction would hardly fail to be as fully remunerative, if not more so, for the hides delivered at the railway station bring but little more than one dollar each.

Even if legislation should compel some men to seek an other mode of making a living, it would be better than to exterminate the buffalo. But I do not propose to discuss the matter; I want to lay the facts before your readers, and let all draw their own conclusions. It seems to me that the conclusion must inevitably be drawn that it is desirable to place limits to the slaughter of this animal, and to do something toward its preservation.

C. B.

The Central New York Sportsmen's Club have elected the following officers for 1881: Charles W. Hutchinson, President; Andrew McMillan, E. T. Manning, Secretaries; Derling, Vice-Presidents; John D. Kerman, President; Attorney; Major D. T. Evers, Treasurer; Frank I. Meyers, Secretary. Dr. John W. Greene, of New York, was unanimously elected an honorary member of the club. The society calls attention to the necessity of incorporating into the game law sections preventing sportsmen and others from leaving fires burning in the woods, so destructive to our forests, and also to prohibit those parties from leaving carcasses and offal near the camps and springs in the Adirondacks.

DUCK SHOOTING AT COBB'S ISLAND.

THE brant are more plentiful here this season than for many years. I secured twenty-five in a tide during my stay at the Island, but I happened to strike the spot at the right time. Sometimes one will have to wait for a week or ten days before he can have a good day's duck shooting.

There are three absolute requisites to stool brant: the tide, the wind and the sun. If the tide is right and the wind is wrong it will not be a sportsman's day. Should the wind set strong and it is cloudy, then you might as well remain away from the blinds; but when the flood tide is running, a strong wind blowing and a bright sun is shining, then it is that the birds will come and come readily to the stool. In a winter's season there is certainly not an average of over two such days in the week, and the hunter will have many hours of weary waiting, which on this island, unless he has companionable comrades, is almost unendurable.

Never was there such an illustration of killing the goose that laid the golden egg as this place presents. The Cobbs, by their extortion and high prices charged sportsmen, have effectively killed their island; for five years ago there were dozens of Northern sportsmen who rendezvoused here for duck shooting, now there are none. I being the sole, solitary visitor, and as the ice prevents any boats from leaving the Island, or from hunting, I feel as desolate as Alexander Selkirk on Juan Fernandez. Even Nathan Cobb is getting sick of his enforced idleness, and wanders disconsolately around his decoys, which he can't use. This is the first ice blockade that has isolated the island from the mainland since the famous winter of 1857.

I send this squib at a venture, and by strange hands, as we used to do in Richmond during the war, and I trust the uncertain word by a notice on the outside of the envelope, "Via Grapevine Telegraph." Anyway it will reach you some day, I trust.

The Cobbs have made heavy bags this season, Nathan sending many dozen to Northern markets. I only average some twenty brant on each tide.

To sportsmen coming here I add this advice, don't come alone, but the more the merrier.

CHAS. B. R.

Cobb's Island, Jan. 1.

CALIFORNIA GAME.

COSUMES, CAL., Dec. 23.

OUR rainy season, which answers to winter, has set in and for the past four weeks we have had plenty of weather, whether we liked it or not. It has brought us an abundance of ducks, however, and a larger proportion of canvas backs than we have ever known before, in fact they were the only duck to be found in the market. Quail are very abundant, and afford fine shooting, when the weather permits. I promised to say a word about our game birds and their habits, so I will say a word about quail. There are several varieties on this coast, the best known being generally distinguished as mountain quail and valley quail. The former frequent the mountain only, except as very severe storms drive them lower down, and are much larger than the valley quail. Both varieties are tufted and are much handsomer in plumage than the eastern quail. I secured two skins from the best of valley quail. The quail here do not frequent open fields as much as those in the East, except corn fields along the river bottoms and near to willow clumps. They are difficult until after the frosts have stripped the trees of foliage; first because their first flight is generally into trees or bushes, where they hide very closely; and second, because they are much more uncertain in their times and places of feeding, pruning themselves, etc., than the Eastern quail. I notice with them the same mysterious power of withholding their scent that Eastern quail have when first flushed. In some parts of the State they collect in coveys of two or three hundred, and will run along the road ahead of a train sometimes for some distance. But alas for the hopes of the Eastern sportsman who thinks he has a soft thing; after the first shot there is a roar of short wings and the birds have dropped into a dense chaparral composed of thorny bushes and almost impenetrable, except for the grizzly bear, and he may spare his time in looking for them and hunting them. In spite of such drawbacks, however, there are plenty enough to make fine bags, and I have known three brothers to kill in two months' shooting 1,300 dozen. Deer are very plenty along the foot hills this winter. I am sorry to hear, however, that great numbers have been slaughtered for their hides, a practice which unfortunately is exterminating the deer in some parts of the State. I am afraid this letter will trespass on your time and space, if it does use the blue pencil. W. L. W.

AN ADIRONDACK TRIP.

UTICA, Jan. 6.

Editor Forest and Stream:

Would "Kessnuck," through your columns, inform a friend and myself of a trip through the Nova Woods that would occupy about three weeks or a month, where only would not meet every few miles with a host of people and all the attendants of civilization? Hard work not the slightest consideration. I forgot to mention that we reside in Utica, and a radius of fifty miles would suit us. We went in last year from Burets above Moorehouseville and a carry of two and one-half miles to Wilhurst Lake, where we intended to stay for our trip, the fishing in the lake being seven. The first morning we were out with two rods we caught seven teen fine fellows, full of life, the least of them weighing one and three-quarters pounds and the largest about two and one-half pounds. But things at the house are not a joy forever (there are sharks in the wilderness), so we struck camp, and taking boat to the end of the lake with our camping out outfit which we had brought with us in case of an emergency, we went to Snag Lake, which is a small lake about two miles from Wilhurst Lake and the roughest and longest I ever wish to carry sixty pounds over. At Snag Lake we had splendid sport, the fish being very plentiful. From there we went to the Metcalf River, but it being rather late in the season—the second week in August—we did not get much sport and returned to camp on Snag and from thence home, occupying about two weeks. A better time or better luck I never struck. The last day we walked down from Moorehouseville to Prospect, a distance of twenty-nine miles without turning hair, a feat that without our two weeks training we should have considered several times about. I mean to send you a full account of our next trip and all particulars. H.

ELIAH CAMP, an Indian guide, thinks that he has discovered two Adirondack lakes never visited by a white man.

good field dog at the Pennsylvania field trials last year, and his kennel companion King Dash, came in order. In the bitch class fourteen out of the fifteen entries came to hand, and again, as in the imported classes, they were a superior lot comparing them with the dogs. Dr. Speir showed in Lizzie Lee one of the very best bitches in the show. She had always been very handsome, but has improved greatly since we saw her in the field last autumn. She has a fine head full of sweetness and intelligence, and is in our opinion the most valuable animal in her owner's kennel. Her condition was excellent (weight, 51 lbs.) and she won on her merits, although in grand company. We have seen a great number of Druid bitches and she compares most favorably with the best of them. Lady Laverack came in for second, and her little sister Daisy Laverack for well-merited mention. It is remembered that the latter was the little bitch that performed so creditably at Vincennes. In the order of the rest of the class was placed, as was the young bitch Dip, a well-made animal with fine legs and the best of feet, a good neck, body and shoulders, but with rather a faulty tail. We heard it said she should have had higher commendation, but consider that she was well taken care of.

ENGLISH SETTER PUPPIES—The dogs were a very fine lot of puppies, and out of the dozen entries only one was missing. Jack Laverack, the winner of first in the native class, came first, and the Baltimore Kennel Club's very handsome eight-month-old puppy Dashing Bob took second. Two in the class received very high mention, namely, Prince Lofty and Given's Dan; the former is to be sent at once to H. M. Short, to be trained for this year's events. The bitch puppies were a fair class, but not equal to the dogs. Mr. Moore's Dolly Day, a sprightly and well-made ten months' old bitch, came first, but Minerva II. and Countess Anna pushed her for the place. Of these two we rather fancied the latter, who had a better head.

CHAMPION IRISH SETTERS—Mr. Moore's Berkley, so well known as the really beautiful type of the breed, was in his finest bench-show condition and easily won over his only opponent, Derg. Berkley's weight was 54½ lbs. Two bitches were entered in the bitch class and Mr. Moore's Loo II. readily secured first. She is a small, well-petted animal, whose weight is 46 lbs.

IRISH SETTERS—Although there were fourteen entries in the dog class, the majority of which were almost without compare with exhibitors of the kind seen on our first-class shows. As we have said, the red Irish and red and white dogs were bunched together and were judged under one heading. Mr. McIntosh's Jax (weight, 55 lbs.), a fine, up-standing, blood-red dog, good all over, easily secured first. He is a dog of gauness and endurance and is perfectly field-broken; Chubb, of Cleveland, is his breaker. Mr. Moore's Raleigh took second and Mr. Strother's handsome Flint was very highly commended. He is remarkably well-made dog. The bitch class was a full one of eight entries. Taken collectively it did not compare favorably with that of the dogs. Prominently, Mr. Pierce's Gussie came first, most richly deserved. She is a fine, large, healthy-looking bitch and was shown in her best style (weight, 56 lbs.). Nora came in for second; at St. Louis, last year, she did not receive mention. Abbey W., who ran in the Derby at Vincennes last autumn, was awarded three letters, as was also Dr. Downey's Kathleen. The former is a fine, healthy-looking old girl, of good color and, when she is attained age, will hold her own with those of her type. The puppy classes contained five entries, three in the dogs' and two in the bitches'. The dogs were all good ones. Mr. Dayton's Flash, who received first, was the best-colored of the lot; a very promising youngster of six months in every respect. Mr. Bulley's Nell had the best head in his class and rightly came second. Of the bitches Mr. Dayton's Red Lion, sister sister to Flash, winner of first in dog class, was very well considered that she is better than her brother in at least two points.

CHAMPION GORDON SETTERS—The dog class was composed of two rattling good entries—Mr. Moore's Bob and the Goldsmith Kennel's Rupert. After a somewhat lengthy inspection, the former was declared the winner, a decision that we consider just. Both dogs were shown in fine condition and both are first-class in every respect. While Bob's coloring is too light, that of Rupert is too dark, so that is a stand-off in the eyes of the judges, but, as the latter is younger and older than the one entered in the class, we are inclined to have his age and is a more showy dog. He has a rich, glossy coat; good, long, lean head; long, well-proportioned back, set well on straight legs (weight, 65 lbs.). In the absence of other entries, Mr. Moore's Stella, a litter sister to Bob, secured first (weight, 57½ lbs.).

GORDON SETTERS—The open dog class was a very good one; it contained five entries. An unnamed son of Rupert's was the best of the lot, being a fine, healthy-looking dog, of good color, carried off first without a tilt; he is a very superior young dog, and we presume will take Rupert's place (weight, 54½ lbs.). Messrs. R. W. Ardary & Bros.' Stubble second; two others mentioned according to rank. The bitch class was a small one of four entries, and as Mr. Moore's Lady Rapid was absent the remaining three fell in the order on the catalogue. Messrs. Ardary & Bros.' Jessie, a very fine bitch (weight, 50½ lbs.), got first and Mr. Moore's Nell second, and Mr. Will's young, pretty two-year-old Grand Duchess a third. Messrs. Hennessey's Grouse II. and Gypsy II. were also in their glory in the puppy dog and bitch classes, and carried off the respective prizes.

CHAMPION POINTERS—There was but one entry in the large class, namely, Mr. Gillman's Gumbo, and he was conspicuous by his absence. In the small dog class Mr. Orgill's Rush met Mr. Moore's Donald for the first time, and after a nip and tuck race came off the winner. Seldom have two dogs been so evenly matched in the ring. Donald, it will be remembered, was promoted to the champion class at St. Louis last autumn; he has a better body than Rush, but not as good head or forelegs or tail. His condition was splendid and he evenly marked coat of liver and white shone like satin. Rush was looking well, as Mr. Orgill's dogs always do; his weight was 53 lbs. In the bitch class Mr. Moore's Lady Romp won with ease; she is a much better bitch to our notion than even Donsah is a dog. She has a splendid head, perfect proportioned body, good tail and a way of carrying it that indicates dash and gauness (weight, 44 lbs.). Mr. Moore's other entry, Rose, was absent, and Cornon, shown in good condition, made up the class.

POINTERS—In the open class for dogs over 55 lbs. five entries were shown. Mr. Moore's Banjo (59 lbs.) captured first. He is a fine, working-looking dog, with good body, legs and tail, fair head, but is too short between stop and nose. He is nicely marked with ticks and was shown in good form. Mr. H. H. Taylor's very good dog, Dr. W. H. Taylor's second, and Mr. Taylor's twig, a very good dog with a superior head, got highly mentioned. One entry comprised the

large bitch class, and consequently Mr. Ealy's Nellie R. (57 lbs.) took first. The small dog class was a good one. Mr. Moore's La Guy was absent and both Mr. Illig's Ned and Messrs. Naysmith and Williams' Duke—good dogs, especially the former—were ruled out for being of overweight. Mr. Fawcett's lemon and white Duke (45 lbs.), a good all-over young dog, but deficient in head, came first; Dick, a dog with better body than head, took second, and Rover, five-headed liver dog, was highly mentioned. A full class of seven entries was shown for the small bitches. They were a remarkably good lot. Mr. Orgill's little lanky, Rue (38 lbs.), gathered in the laurels for the best. She was shown in good condition and attracted much attention. The Baltimore Kennel Club's Cleo got second. She has a more perfect body than head, and her litter sister Clymont, with an unusually good head, received a v. h. c. Mr. Anderson's Prank, a very well-made and showy little bitch, received no mention. But for a defective eye she would have deserved second place. Eight entries made up the dog-puppy class. The youngster Garfield was awarded first. The Goliath of the show in the sporting class was turned up in Mr. Carr's Rip, a nine-months-old puppy of 80 lbs.!! He was well proportioned and free from the awkwardness usually found in mammoths. He stalked around the ring to show music and accomplished the routine in about four strides. We saw all of his class who came within reach of his tail. He possessed a dignified expression that brought out shouts of laughter and set the tongues of the wisps-waggings. It was suggested that he would be a good dog for a tired man to hunt, for when he got "bushed" he could get on and ride home. In the bitch puppy class of four entries Mr. Joseph Lewis' Nell and Fan had a close race for first. They were as like as two peas as far as points were concerned, but at last the latter got the ribbon and her litter sister Nell a v. h. c.

LITTLE WHITE SPANIELS in the Irish water spaniels there were five entries. Only two, however, Major and Dan, a brace of four-months-old puppies, had any claims to consideration, and with age may develop into creditable specimens of the breed. The other entries showed a preponderance of Sussex and cocker blood.

COCKER SPANIELS—First went to the liver and white Nell, belonging to Mr. A. H. Moore, a good-styled bitch, but too fat to show at her best. Flora, who got second, is a very nice one, and Flo, highly mentioned, also good, but rather large.

FIELD SPANIELS—Only one entry in this class. Lu, a black and white, a very fair bitch, justly received first. **FOXHOUNDS**—This class comprised five entries. First fell to Granger, a capital hound, full of quality. Rover, who received second, is a large hound, but very symmetrical withal. Poodle, a black and tan, got h. c. He is of medium size and is a very nice one, barring his rump, which hopes too much. Lead is of medium quality only, and Hinggold ranks about the same.

BEAGLES—These merry little dogs were a strong class and of excellent quality throughout. As there were two distinct types on exhibition—one the ordinary English straight-legged beagle, the other the bench-legged beagle (so named from the turning out of the fore feet), common in Maryland and Delaware, and as judged by the English standard the bench-legged beagle could be virtually excluded from competition, the committee, at the solicitation of Dr. L. L. Twaddell, the judge, Dr. Maddux and Gen. Bond, two prominent exhibitors, decided to establish a new class with a similar prize list, for the benefit of the breeders of the bench-legged dog. In the straight-legged class the first went to Fly, black, white and tan, a very neat, nice dog. His only competitor, Harry, a mottled black, white and tan, is a close-built cobby dog, whose defect is that he is rather scant of ear, but a good one withal. He was well worthy the second he received. In the straight-legged bitches Lullie was an easy first; second went to Nancy, a very neat young bitch. Venus, v. h. c., is a very good one, but just a little long in the back. Dot, v. h. c., is well cared, but a little throaty and coarse in tail; in other respects good. Lucy, h. c., we fancied a little weedy. In the straight-legged puppies Baker's Belle, a very beautiful four months' old youngster, was clearly the best, and this in a strong class both in numbers and quality. Bench-legged dogs, only two entries turned up, the major dog, Freddy, is one of the handsomest dogs of this type we have ever seen. Dyke, winner of second, is a fine dog, full of the character of his race, but lacked the quality of his competitor. In the bench-legged bitches, first went to Dell, a beautiful black, white and tan bitch puppy, entered in the aged bitch class. Second to Jennie, black, white and tan, a very fair one. These were the only entries. Three entries were in the bench-legged puppies. Dale, a very handsome little bitch, won the first prize; second went to Lucy, and third Sam II. secured a h. c.

DACHSHUNDS—There were only three entries of the hound type and the judge awarded first to Marguerite, a handsome young black and tan bitch, with good head, plenty of leather and well-bent fore-legs. Second went to a fallow-red, Gretchen. We did not fancy her much, as she is too much out at elbow. Jim, v. h. c., is short in body and ears, too thick in substance and, besides, his color is bad. Two small dachshunds of the Sausstrubbe breed were awarded a special first prize, as they are a distinct type, and are very useful and essentially a vermin dog, while the dachshund of the hound type is a dog of the chase.

FOX-TERRIERS—First went to Bowstring, a little dog with immense muscle and good coat. The second went to Shot, a neat dog, good jaw and well-set ear, but rather high on leg and not so good in coat as first. V. h. c. was well earned by Nailor. In bitches Tussie was awarded first, closely followed in merit by Vision. Between them there was little to choose. The rest of the class stood in merit as they were placed. Allamuchy Nell was first in puppies and was a very good one. Joker deservedly came next with three letters and Prince we did not like, being too leggy. Sally was fair.

GREYHOUNDS, SCOTCH DEERHOUNDS AND MASTIFFS—The former were absent and the two last-named classes contained no entries.

ST. BERNARDS—Three entries—one smooth and two rough-coated. They competed in one class. First went to Tiger, rough-coated dog of imposing appearance, but needs more flow and is deficient in jaw; he also lacks dew claws. Snowball, the smooth-coated, was awarded second. She is also weak in muzzle and lip and her fore-legs are not of the best. The other entry was a large liver-colored cross-bred, who received no recognition.

NEWFOUNDLANDS—Only three entries—one a fairly good Landseer, the others claiming to be the St. John's dog. First went to Mr. Williams' Lion, of the Landseer type. Second to the black dog, Dr. W. H. Taylor's Red Lion, a curly and whose tail was bad. Jessup's Lion was entirely too curly-coated to win the recognition he received.

COLLIES—These were a strong class in numbers and quality. The black and tan Tweed II. went to the front. Close to him in merit was the beautiful Lass o' Gowrie. Tweed II. is the dog that distinguished himself in the international collie trials at Philadelphia in September, 1880. Sheep was very highly commended and is a very fair collie. Stella, same award, was wrongly entered in the smooth collie class, as were the puppy, Nell h. c. and Bruce. Lucy is also a good-looking bitch.

BULL DOGS—First went to the brindle and white Doctor, a dog of pronounced character. Second to Moore's Turk a brindle and white, rather long in the nose for a high class dog, and scarcely enough undershot, but in other respects excellent.

BULL TERRIERS—Silk II. had an easy race for first place, a very handsome young dog good in everything, but his tail, which might be a shade lighter. Rose, who took second, is a long way behind in muzzle, which is too short. Bell is off color, a dark brindle, in form a very neat looking bitch. Belle only ordinary and off color at that.

SKYE TERRIERS—Of the Skyes there was a large entry, but only about five that would pass muster, the others lacking terribly in coat and other breed marks. Mack, a very handsome dog of steel gray color in magnificent coat, deservedly was placed first. Tuck, a blue gray, a little out of coat, got second. Scottish Queen was very close to Tuck in quality, and both specimens, but the former had a nip rather short in body though a very muscular little dog. Isla was only ordinary.

PROS—Young Sooty, the first, is a good pug at all points. May, winner of second, is also a very nice one. Jack is of nice color and even quality, not however equal to the winners, the other competitor Bob is very deficient in carriage of tail.

SCOTCH TERRIERS—First went to Captain, whom we thought a trifle too soft in coat; second to Sir Walter Scott, an immature puppy too young to have much character.

BLACK AND TAN TERRIERS—Nell, a very handsome little bitch, good in coat and color, was an easy winner of first; second went to Primie, who was behind her competitor in several points. These were the only entries.

YORKSHIRE TERRIERS—First was awarded to Jimmy, who was about the best; second, fairly good; after them Sport we liked best, the other lacked cut.

FEARLESS DOGS—Mr. A. H. Moore's Cream was in the best form and won by that alone. Pearl looked out of condition, but will be a splendid specimen when in show-bench trim, and we think will, all things equal, beat her kennel mate. Crissie is a moderately good bitch; her tail is defective, which mars her chance for high-rating.

MISCELLANEOUS DOGS—This class was a hotch-potch, made up of all breeds. Among the lot was a foxhound entered as a "buckhound," a dog, Flash II.; called a Bedlington terrier, which he was not; poodles, Cobby, lapdogs, etc., made up the exhibit. None of the dogs showed much merit, the best bred animal in the lot being the foxhound. If there is any class at a dog show that "stumps" the noble army of spectators, it is the miscellaneous class, and sometimes the judges are bothered to an extent that borders on uncertainty. The unfortunate "Bedlington" came in as a 13, 15, 14 puzzle for the crowd, and was taken in turn for a Skye, a poodle and a retriever; he was in fact a dog of many breeds, and was entered in the proper class.

Several typographical errors having occurred in our last issue in publishing the list of awards, we reproduce this week a corrected list. Such errors are unfortunate, but will occur when reports come in late.

OFFICIAL LIST OF AWARDS.

[v h c, very highly commended; h c, highly commended, and c, commended.]

Class 1.—Champion English Setter Dogs—First, A. H. Moore's Leicester.

Class 2.—Champion English Setter Bitches—First, D. Bryson's Peep o' Day. A. H. Moore's Rosey Morn absent.

Class 3.—Imported English Setter Dogs—First, Snellenburg & McConnell's Thunder; second, A. H. Moore's Duke of Beartfort; v h c, A. H. Moore's Temple Bar and R. T. Vaudey's Rock; h c, E. Moore's Dash.

Class 4.—Imported English Setter Bitches—First, R. F. Wilson's Shark; second, Howard's Ruby; v h c, Snellenburg & McConnell's Peaches, A. H. Moore's Lass o' Gowrie, E. A. Given's Minerva; h c, S. Fleet Spier's Wanda. A. H. Moore's Lily absent.

Class 5.—Native English Setter Dogs—First, Snellenburg & McConnell's Mack Laverack; second, Snellenburg & McConnell's Dick Laverack; v h c, Philip Wolfenden's Young Belton, James Hennessey's Daniel the Prophet, Samuel C. Hunter's Sam II., Henrietta & Stayton's Belton III; h c, Dr. T. Clay Madden's Marquis of Lorne, D. C. Phillip's Tony, Henrietta & Stayton's King Dash, K. Steth's Nimrod and J. N. Dodge's Duke, absent.

Class 6.—Native English Setter Bitches—First, S. Fleet Spier's Lizzie Lee; second, Snellenburg & McConnell's Lady Laverack; v h c, Snellenburg & McConnell's Daisy Laverack, Henrietta & Stayton's Skip, James Hennessey's Ima, and E. A. Given's Minerva; h c, Snellenburg & McConnell's May Lee, A. C. Wilson's Duff's Dip and Philip Wolfenden's Nettie; c, Henrietta & Stayton's Floss II. Theo. Schwartz, J. R. Fay, absent.

Class 7.—English Setter Dog Puppies, Under 12 Months—First, Snellenburg & McConnell's Mack Laverack; second, Baltimore Kennel Club's Dashing Bob; v h c, Henrietta & Stayton's Prince Lotte, John Given's Dan; h c, S. Fleet Spier's Iolande; c, Geo. W. Stevenson's Toss and J. M. Hunter's Pride of the North. D. D. Evans' Jim, absent.

Class 8.—English Setter Bitch Puppies, Under 12 Months—First, Geo. W. Moore's Dolly Day; v h c, Snellenburg & McConnell's Lu Laverack, Baltimore Kennel Club's Countess Anna and W. A. Given's Minerva II; h c, James Hennessey's Kitty M.; c, W. L. Carr's Style.

Class 9.—Champion Irish Setter Dogs—First, A. H. Moore's Berkley.

Class 10.—Champion Irish Setter Bitches—First, A. H. Moore's Loo II.

Class 11.—Irish Setter Dogs—First, John S. McIntosh's Blitz; second, A. H. Moore's Raleigh; v h c, W. A. Strother's Flint; h c, James Hennessey's Conn; c, Edward Gregg's Bob II. J. N. Dodge's Bob, absent.

Class 12.—Irish Setter Bitches—First, Wm. H. Pierce's Gussie; second, James Hennessey's Nora; v h c, John S. McIntosh's Annabel Lee; c, John Fawcett's Juno.

Class 13.—Irish Setter Dog Puppies, Under 12 Months—First, Class, H. Dayton's Flash; v h c, Reginald H. Bulley's Ned; h c, Dr. C. Spaher's Red Hunter.

Class 14.—Irish Setter Bitch Puppies, Under 12 Months—First, Class, H. Dayton's Red Lion.

Class 15.—Champion Gordon Setter Dogs—First, A. H. Moore's Bob.
 Class 16.—Champion Gordon Setter Bitches—First, A. H. Moore's Stella.
 Class 17.—Gordon Setter Dogs—First, Goldsmith Kennel Club's Rupert; second, H. W. Arday & Bro.'s Stable; v h c, D. C. Patterson's Check; h c, Dr. H. H. Hopkins' Grouse II.
 Class 18.—Gordon Setter Bitches—First, R. W. Arday & Bro.'s Jessie; second, A. H. Moore's Nell; v h c, Ed. L. Mills' Grand Duchess. A. H. Moore's Lady Inipid, absent.
 Class 19.—Gordon Setter Dog Puppies, Under 12 Months—First, James Hennessey's Grouse II.
 Class 20.—Gordon Setter Bitch Puppies, Under 12 Months—First, James Hennessey's Grouse II.
 Class 21.—Champion Pointer Dogs, over 55 lbs.—One entry; E. H. Gilman's Gumbo, absent.
 Class 22.—Champion Pointer Bitches, over 55 lbs.—No entries.
 Class 23.—Champion Pointer Dogs, under 55 lbs.—First, Edmund Orgill's Irish.
 Class 24.—Champion Pointer Bitches, under 55 lbs.—First, A. H. Moore's Lady Romp. A. H. Moore's Rose, absent.
 Class 25.—Pointer Dogs, over 55 lbs.—First, A. H. Moore's Banjo; second, Harry Reynolds' Tom; h c, J. M. Taylor's Twig.
 Class 26.—Pointer Bitches, over 55 lbs.—First, A. J. Ealy's Lady R.
 Class 27.—Pointer Dogs, under 55 lbs.—First, John Fawcett's Duke; second, J. C. Holmberg's Dick; h c, Dr. C. Spahr's Rover. A. H. Moore's La Guy, absent.
 Class 28.—Pointer Bitches, under 55 lbs.—First, Edmund Orgill's Rue; second, Baltimore Kennel Club's Cuck; v h c, Baltimore Kennel Club's Clymont; h c, W. A. Sletch's Queen.
 Class 29.—Pointer Dog Puppies, Under 12 Months—First, John Fawcett's Garland; v h c, John Fawcett's Duke; h c, Joseph Lewis' Duke.
 Class 30.—Pointer Bitch Puppies, Under 12 Months—First, Joseph Lewis' Fan; v h c, Joseph Lewis' Nell.
 Class 31.—Irish Water Spaniels—First, withheld; second, Samuel Cowley's Major; v h c, Samuel Cowley's Dan.
 Class 32.—Cocker Spaniels—First, A. H. Moore's Nell; second, Thos. D. Adams' Flora; h c, Thos. D. Adams' Flo.
 Class 33.—Irish Water Spaniels, Other Than Cockers—First, Geo. W. Moore's Luc.
 Class 34.—Fox Hounds—First, Steel Bros.'s Grainger; second, Joseph Lewis' Rover; h c, J. D. Williams' Poodle.
 Class 35.—Beagles, Straight-legged—First, J. E. Diehl's Fly; second, Geo. W. Norcross' Harry. Isaac R. Stayton's Rover and J. N. Dodge's Battler, absent.
 Class 36.—(Special) Beagle Dogs, American Bench-legged—First, Pottinger Dorey's Major; second, Dr. Clay Maddux and Gen. Frank A. Bond's Dyke.
 Class 37.—Beagle Bitches, Straight-legged—First, Dr. T. Clay Maddux and Gen. Frank A. Bond's Lulu; second, J. A. Stovell's Nancy; v h c, Robert M. Baker's Dot and Pottinger Dorey's Venus; h c, John E. Diehl's Lucy. J. N. Dodge's Spider, absent.
 Class 38.—(Special) Beagle Bitches, American Bench-legged—First, Dr. T. Clay Maddux and Gen. Frank A. Bond's Delt; second, Chas. Illig's Jennie.
 Class 39.—Beagle Puppies, Straight-legged—First, Robert M. Baker's Belle; v h c, John Bittner and Bro.'s Boudie; Chas. Illig's Nancy; c, Pottinger Dorey's Cleopatra. J. N. Dodge's Roxy II, absent.
 Class 40.—(Special) Beagle Puppies, American Bench-legged—First, Dr. T. Clay Maddux and Gen. Frank A. Bond's Delt; second, Pottinger Dorey's Lucy II; h c, Dr. T. Clay Maddux and Gen. Frank A. Bond's Delt.
 Class 41.—Dachshunds—First, J. A. Stovell's Marguerite; second, J. A. Stovell's Gretchen; v h c, John Fawcett's Jim.
 Class 42.—(Special) Saarsenbeck Dachshunds—Jacob Wieseke's Max and Fan divided first.
 Class 43.—Fox Terrier Dogs—First, L. and W. Rutherford's Bowstring; second, James Mortimer's Shot; v h c, L. and W. Rutherford's Noddy. James Mortimer's Vandal, absent.
 Class 44.—Fox Terrier Bitches—First, L. and W. Rutherford's Tussle; second, James Hennessey's Vixen; v h c, Fred, W. Fleck's Gipp; h c, L. and W. Rutherford's Chauce; c, L. and W. Rutherford's Active.
 Class 45.—Fox Terrier Puppies, Under 12 Months—First, L. and W. Rutherford's Allamuchy Nell; v h c, L. and W. Rutherford's Joke; h c, Fred, W. Fleck's Prince, and L. and W. Rutherford's Sally; c, Dar Gardner's Susie G.
 Class 46.—Greyhounds—Entries absent.
 Class 47.—Scottish Deerhounds—No entries.
 Class 48.—Mastiffs—No entries.
 Class 49.—St. Bernards—First, Fred, George's Tiger; second, William J. Jones's Snowball.
 Class 50.—Newfoundlands—First, J. D. Williams' Lion; second, W. C. Meyer's Pinto; h c, Alfred Jessup's Lion.
 Class 51.—Shepherd or Ulm Dogs—No entries.
 Class 52.—49.—Shepherd Dogs or Collies, Rough-coated—First, Dr. J. W. Dwyer's Tweed II; second, Dr. J. W. Dwyer's Lass o' Govrie; v h c, Robert Bell's Shop, Geo. S. Houghton's Stella; h c, Geo. S. Houghton's Nell, Jacob Drake's Lucy; c, David Foster's Ring.
 Class 53.—Bull Dogs—First, James Mortimer's Dork; second, Geo. W. Moore's Turk.
 Class 54.—Bull Terriers—First, James Mortimer's Silk II; second, H. C. Elliot's Rose; v h c, W. E. Gaing's Bell; c, Wm. Veal's Belle.
 Class 55.—Slye Terriers—First, Gilbert Rafferty's Mack; second, A. H. Moore's Tuck; v h c, A. H. Moore's Scottish Queen; h c, A. H. Moore's Nip; c, Paul H. Hacke's Isley.
 Class 56.—Pugs—First, A. H. Moore's Young Scooty II; second, A. H. Moore's May; h c, A. H. Moore's Jack. J. Fred. Cross Tincy, absent.
 Class 57.—Scottish Terriers—First, Gilbert Rafferty's Captain; second, E. H. Gillman's Sir Walter Scott.
 Class 58.—Black and Tan Terriers—First, Daniel Bittner's Nell; second, Jacob Drake's Primrose.
 Class 59.—Yorkshire Terriers—First, A. H. Moore's Jimmy; second, A. A. Hutchinson's Flint; v h c, James Hennessey's Sport.
 Class 60.—King Charles or Blenheim Spaniels—No entries.
 Class 61.—Italian Greyhounds—First, A. H. Moore's Cream; second, A. H. Moore's Pearl; c, Wm. Montgomery's Crisic.
 Class 62.—Miscellaneous and Foreign Class—First, John Bittner & Bro.'s Tin (Cuban-Poodle); second, Geo. W. Moore's Flash II (Boullington Terrier); v h c, Daniel Bittner's Daisy (Cuban Poodle); Dar, Gardner's Bess Dickson (French Poodle); J. D. Williams' North (Buck Hound); James Hennessey's Pete (Blue Tan Terrier); h c, Daniel Bittner's Nell (French Poodle); Daniel Bittner's Sarah Bernhard (Cuban Poodle); Dar, Gardner's Royal Jim (French Poodle).

SPECIAL PRIZE LIST.

Class A.—For best Setter dog or bitch, of any strain—Parker Brothers Breech-loading Gun, value \$180. Prize, A. H. Moore's Berkeley.
 Class B.—For second best Setter dog or bitch—J. J. Snellenburg, New Brighton, Pa., Hunting Suit, value \$50. Prize, A. H. Moore's Leicester.

Class C.—For best Irish Setter dog—Schuyler & Dunne, 189 Broadway, New York City, Photograph of Erie and Biddy, value \$10. Prize, A. H. Moore's Berkeley.
 Class D.—For best Pointer dog—Schuyler & Dunne, 189 Broadway, New York City, Photograph of Keenack and Jessamine, value \$10. Prize, Edmund Orgill's Irish.
 Class E.—For best Gordon Setter dog—Lafin & Rand's Powder, value \$10. Prize, A. H. Moore's Bob.
 Class F.—For best English Setter dog—Lafin & Rand's Powder, value \$15. Prize, A. H. Moore's Leicester.
 Class G.—For largest collection of non-sporting dogs exhibited by one person—The Bear Creek, 10, barrel Water White Oil. Prize, A. H. Moore, Philadelphia, 10 dogs.

PENNSYLVANIA FIELD TRIALS ASSOCIATION.—A meeting of this most excellent organization was held at Pittsburgh, Pa., on January 19, the following members being present: Messrs. W. H. Brown, J. W. Orih, S. D. Thompson, J. R. Henricks, J. J. Snellenburg, Dr. Graham, William A. McIntosh, Isaac H. Stayton, C. B. Wilford and F. Satterthwaite, of the Forest and Stream. Mr. J. R. Henricks, of Philadelphia, was unanimously elected a member of the association. Mr. McIntosh referred to the clause in the minutes censuring Captain William Roehm, of Quarryville, Pa., for breaking faith with the Lancaster County Game Protective association, and shooting and allowing to be shot the quail that he had promised to preserve for the Pennsylvania field trials of last year. Mr. McIntosh went on to say that as he had seen in Forest and Stream a notice of a meeting in December last of the Lancaster Game Association, at which Captain William Roehm had been exonerated from the charges preferred against him, he desired that the secretary be instructed to communicate with Mr. P. A. Dillendorfer, of Lancaster, a member of said Lancaster Game Association and treasurer of the Pennsylvania Field Association, and request that the association be informed the reasons for such action. Carried.

Mr. J. R. Henricks moved that the association purchase at once one hundred dozen quail, for the purpose of stocking the grounds on which this year's trials are to be run, the price not to exceed \$2 per dozen.

Mr. McIntosh offered an amendment to the above, by suggesting that \$200 be expended for the purchase of quail. Carried.

Mr. Snellenburg moved that a committee of three be appointed by the Chair to revise the field trials' rules of the Association. Carried.

Mr. Stayton asked the expression of the meeting to substitute a field trials Derby in place of the puppy stakes at the next trials, and after lengthy discussion it was decided to do so.

Mr. McIntosh, in this connection, moved that puppies whelped on or after January 1 of the previous year to the running of the trial be eligible for entry. Carried.
 Mr. Snellenburg moved that the association open its trials to the world, and that a special meeting be called to consider the advisability of so doing. Carried.

The Chair then named February 2, 2 p. m., as the date and hour when the special meeting would be held, and the meeting then adjourned.

THE STERLING DOG SHOW.—The first annual exhibition of the Rock River Valley Poultry and Kennel Club is to be held in Farwell Hall at Sterling, Illinois, on the 10th, 11th and 12th of February. The dog show will have classes for all the strains of setters, for pointers over and under 50 lbs., and for setter and pointer puppies. Also for collies, Newfoundlands, St. Bernards, English mastiffs, bloodhounds, bulldogs, bull terriers, Dalmatians, all varieties of spaniels, all varieties of hounds, Scotch terriers, Slys terriers, black and tans, pointers, Spitz, Italian greyhounds, poodles, King Charles's, Blenheim spaniels and other toy dogs.

Mr. C. A. Keefe has been chosen judge. The entry fee is \$1. Entries close February 8, and all dogs must be at the hall by February 10. The premiums are: To the best dog of any class, 75 per cent. of the entrance fees; to the second, a ribbon v. h. c.; to the third, a ribbon h. c. There is also a list of special prizes, among which are included a Scotch terrier pup; for the best dog or bitch of any strain; a trophy from Mr. J. F. Streeter, a year's subscription to Forest and Stream for the best Irish setter puppy; another for the best pointer puppy, and another for the best Llewellyn setter bitch, all from the Forest and Stream Publishing Co. The American Express Company have agreed to return free of charge all dogs that have paid full rates to the show.

THE NEXT NATIONAL TRIALS.—Memphis, Tenn., Jan. 15.—Editor Forest and Stream: Grand Junction, Tenn., fifty miles east of Memphis (crossing of the Memphis and Charleston and the Mississippi Central Railroads) has been selected for holding the N. A. K. C. trials for 1881. After personal inspection, I am of the opinion that no place yet selected will equal Grand Junction for extent and adaptability of the grounds, the number of birds, accessibility of grounds from hotel and hotel accommodations. In drawing a field between the two railroads we found forty coveys of quail, averaging ten birds to a covey; in this less than three miles of the hotel. These grounds have been placed at the disposal of the N. A. K. C. for the trials this year by Mr. Gaither, representing 5,000 acres. Others will give the same privilege if necessary. Mr. Gaither will post and protect his lands from shooters. In the day's inspection I did not see five acres that would be objectionable to any man running dogs. I was surprised to find that the new law regarding the diminished trapped birds will be turned down in March—ample time for raising birds this year.

P. H. Biverson.

Pres't N. A. K. C.

DR. STROTHER'S KENNEL.—A nice little kennel than that belonging to Dr. W. A. Strother, of Lynchburg, Va., can scarcely be met with anywhere. To begin with, there is his prize bitch Frost, noted for her great beauty and her nose. Then comes her son, which is (Gladstone II and Lady), the former especially taking after their sire (Champion Gladstone) in speed and dash. It is quite a treat to see these dogs at work, they have so much pace and style about them, and though under perfect command are quite free from that frightened, cringing way that bespeaks harsh training. Frost has at present another beautiful litter by Gladstone, about two months old, a brace of which are, I believe, for the first time, a dog for Capt. McMurdo, and upon the balance will be retained by the Doctor. I must not forget to mention his fine red Irish setter dog Flint, who was awarded third prize at the last New York bench show. He is a remarkably intelligent dog and much resembles his sire, Elcho. M.

MORAWK KENNEL.—Chatham, Ont., Jan. 18.—Editor Forest and Stream: I have entered into partnership with Mr.

Joseph Kime, V. S., of this place, and we have organized a kennel to be known as the "Morawk Kennel." We are starting under very favorable auspices, with the very best stock procurable, and as there is an abundance of game here of all kinds, we are very hopeful of the results. My partner is a thorough sportsman, an excellent shot, and has been accustomed to the handling of setters and pointers for many years. We have this day added to our kennels the imported setter bitch Princess Belle by Rufus out of Blinbrook's (now Dodge's) "Rose." She is a hands-me lioness Belmont, and shows the best of field qualities. A. B. CLAYTON, M. D.

ENGLISH HARE BEAGLES.—In a late issue of the Forest and Stream I notice the announcement of (to me) a new breed of beagles, the English hare beagle owned by Mr. N. Elmore, of Granby, Conn. Will Mr. Elmore, through the medium of your paper, kindly inform us as to their appearance, size, hunting qualities, etc., as compared with the ordinary English beagle, and also in what part of England they originated? LETUS.

COUNTRESS BEAR.—In the absence of our Kennel Editor at Pittsburgh last week an absurd error found its way into our columns, the celebrated Llewellyn setter bitch, Countess Bear, being referred to as a pointer. Such a mistake, though much to be regretted, would fortunately not mislead many of our readers, to most of whom this celebrated bitch is so well known.

NOVA SCOTIA KENNEL CLUB DOG SHOW.—Halifax, N. S., Jan. 13.—Editor Forest and Stream: At a meeting of the Nova Scotia Kennel Club, held on January 11, in this city, it was decided to postpone the dog-show in view of the fact that the Dominion Exhibition is to be held in Halifax next autumn, and we think it better to throw all our energies into making a dog-show in connection therewith.

JOHN NAYLOR, Hon. Secretary.

REMOVAL OF CAPT. MCMURDO'S KENNEL.—Capt. McMurdo has removed his kennel from Evinston to Shadwell Depot (on the C. and O. R. R.), five miles from Charlottesville, Albemarle County, Va. His kennel is a small but select one, chiefly composed of Llewellyn setters.

LOST.—A very handsome pure black setter dog, of medium size, who strayed away on January 20 from No. 9 East Thirty-fourth street. Twenty-five dollars will be paid for his return to his owner, Mr. Gilbert M. Speir, Jr. The dog's eyes are clouded.

PHILADELPHIA DOG SHOW.—Nothing definite as yet has been determined upon regarding the time for holding this show, but in all probability the Quaker City will be the next dog centre early in April.

LOST.—A pug dog of large size and good type, strayed from 50 East Thirty-first street, this city, on January 18. He was without a collar. Any information regarding him will be thankfully received by the Kennel editor of this paper, who will liberally reward the finder for his return.

KENNEL MANAGEMENT.

47 A CONSTANT BREAK.—1. My dog, that had the distemper so badly, does not eat much. I think his stomach is out of order. 2. He has had a sort of tumor under his elbow joint of foreleg. 3. He has still a little canker in his ears. 4. What is the best book on dog breaking that you know of? 5. What do you think of Vero Shaw's book? 6. Who gives good information how to condition a dog for the bench? Ans. Want of space will oblige me to answer as briefly as possible your queries in their successive order, but a treatise might be written on each. The old saying that "it is much more easy to ask questions than to answer them" holds good here and in all cases where the description of the dog's ills are not clearly diagnosed. 1. Try a little sulphur from time to time in your dog's food, and, if not successful, give two grains of quinine three times a day for several weeks. Feed good wholesome food, and avoid giving meat until you have mastered the canker. 2. It is simply impossible to recommend a treatment for the tumor until its character is known. Either a section or rubbing it with compound iodine ointment should be adopted. 3. For the canker continue to use the lead water, and by feeding no meat, and attending to the dog's general health, you will soon end this trouble. 4. Hutchinson's "Dog Breaking" we can furnish it. 5. Excellent: it is the best compilation of the kind ever produced. Its value is in its being a compilation of articles written by the most eminent authorities of the day. No one man can write understandingly upon all the different breeds of dogs, and it is about one man's work to understand three or four breeds intelligently. Although Mr. Shaw kindly furnishes us exclusively with the advance sheets of his serial, which we publish from week to week, yet the book itself should be in the hands of every sportsman. Its colored plates add greatly to its charm. 6. "Book of the Dog," Parts I. and II., price 40 cents each.

48 V. S. L., Asheville, N. C.—The inflammation between the toes of your dog's feet is one of the different varieties of mange. Use Glover's Mange Cure and give five drops of Fowler's solution of arsenic twice a day with food. Avoid feeding meat. His diet should consist of cooling food mixed with vegetable matter.

49 A. J. N., Anna, Ill.—I have a Gordon setter who is continually scratching himself in the sides and near the forelegs. Ans. You should have given more particulars, such as age of dog, habits and manner of feeding. He probably has mange. Stop feeding meat. Give him a few doses of sulphur and a mild purge of sulphate of magnesia with plenty of exercise. If the mange is pronounced some external application will also be necessary. Read the Kennel Management column.

50 ANSEROUS FOR DOGS.—Editor Forest and Stream: Seeing in a late copy of a sporting journal an article highly commending the use of arsenic in cases of dog distemper induced me to give my own experience with it in the same way. I had been an industrious reader of the papers advising as to the treatment of distemper, and was inclined to place great confidence in arsenic given persistently and in small doses. Perhaps I had more faith in it from knowing that it was much and successfully used in the same way as a febrifuge on the human subject. Previous to the past spring I relied on arsenic with varying results. When it seemed to fail I placed the blame on some other unfavorable circumstance, as too

much confinement or something else wrong. But last year I had a young dog taken with distemper and used acetic for about a week without any perceptible improvement, when suddenly I remembered seeing arsenic placed by a high authority as next in reliability to quinine in the treatment of fever and ague. At once I gave a small dose of Fowler's solution of arsenic, and within five minutes the dog brightened up and began to eat, and went on steadily improving until entirely well. I afterward learned that quite a number in Wilkesbarre had used arsenic and with the best success.

A. GOODWIN.

[THE FOREST AND STREAM has repeatedly put itself on record as to the value of Fowler's solution of arsenic in the treatment of dogs, and also as pertaining to acetic. Both agents are violent poisons and should be given with great caution and good judgment. We deprecate the use of acetic except by experienced persons, because paralysis and other evil results of its poisoning power are apt to ensue if carelessly given. The ancients considered it the most deadly thing in nature, and modern experience almost justifies this opinion. Acting directly through the nervous system, it has great power in diminishing excessive action of the heart, and is thus of use in some fevers; but great care is required at the same time that loss of vital power does not also follow. Again we say that there is no specific for distemper; the disease must be treated in the various stages rationally in accordance with the symptoms.]

51 G. D. P., Baltimore, Md.—My setter bitch has had all the hair and skin on the end of her tail worn off by whipping it against the briars, and now that the skin has healed it looks as if the hair would never grow again. Ans. If worn off for the first time the hair will probably grow again, but when the hair follicles are destroyed by repeated whippings the hair will not grow and there is no remedy. Give the dog's tail a rest. Many pointer's tails are docked for this reason.

52 Thr. New York City.—My pug dog, about six months old, is sick. She suffers from loss of appetite, depression and very often throws up violently. I notice also a twitching of the limbs when asleep. The pug is carefully fed on milk, etc., and well cared for. Will you kindly prescribe for her? Ans. At her age it is quite possible she is about to have distemper. A mild purgative, such as castor oil, or sulphur followed by sulphate of magnesia will be of use to her in any case.

53 H. D. C., Laconia, N. H.—I have a Gordon setter puppy, nine months old, that I would like you to prescribe for in your next issue. Her nose has always been hot and dry and she now runs at the eyes very badly. Has a good appetite and is in good spirits—appears well, with these exceptions. The discharge from her eyes is thick and yellow, and a quantity of it. Please answer in next issue. Ans. The symptoms are those of the first stage of distemper. Give an emetic of salt and then sulphur, a few hours followed by sulphate of magnesia; then two grains of quinine three times a day will probably do good. Keep the eyes and nose cleansed with tepid water.

54 C. O. U., Utica, N. Y.—I have a friend who wishes me to get some remedy for a puppy which has, as near as I can find out from the description given in "Hallow's Gazetteer," the splenic fever. His symptoms serve the description exactly. Ans. As you fail to mention the breed of dog it is impossible to give exact treatment. Give every few hours castor oil and injections of warm opoids and oil, and from two to five grains of iodide of potash three times a day.

55 J. C. B., Salem, Mass.—I have a Newfoundland dog about four years old which last summer had the mange and now it has left him. He is very stiff in his hind-quarters and seems after running to be unable to get up when he has lain down to sleep. Can you tell me what I can do for him? Ans. The dog is suffering from partial paralysis of the hind-quarters. The following treatment will probably be beneficial: Administer infusion of digitalis, one teaspoonful combined with fluid extract of nuxvomica; one drop doses, to be gradually increased until followed by beneficial results.

56 T. A. S., Etta Green, Ind.—The duration of estrus is usually from ten to twenty days.

KENNEL NOTES.

* Breeder and owners of sporting dogs are invited to send memoranda of names claimed, bred, whelps, sales, etc., for insertion in this column. We make no charge for the publication of such notes.

NAMES CLAIMED.

Dan—Mr. Austen Mann, of Brownville, Tenn., claims the name of Dan for orange and white setter puppy, seven months old, out of Nellie by Flash.

Elcho—Mr. Austen Mann, of Brownville, Tenn., claims the name of Elcho for black and white setter out of Nellie by Flash.

Guy—Mr. S. McKnight, of Taylorville, Ill., claims the name of Guy for dog puppy out of Nell by Prince purchased from Mr. O. F. Cromwell.

Bessie—Mr. O. F. Cromwell, of Taylorville, Ill., claims the name of Bessie for bitch puppy out of Nell by Prince.

Jack and Judy—Mr. J. C. Jordan, of Portland, Maine, claims the names of Jack and Judy (Rake-Rose whelps) for Chesapeake Bay puppies, whelped June 4, 1880, purchased from Mr. G. G. Hammond, New London, Conn.

Nancy—Mr. William Allison, of West Seaside, Mass., claims the name of Nancy for Irish setter bitch, puppy out of May by champion Berkeley purchased from Mr. J. A. Rockwood, Boston, Mass.

Carlovitz—Mr. James H. Goodell, New York, claims the name of Count Noser for his black and white pure Laverack setter by Carlovitz out of Princess Nellie (Pride of the Border-Pet), whelped July, 1879. The dog was formerly known as Blue Iain, and in the judgment of Mr. Von Culm by whom he was bred he is the handsomest pure Laverack ever sired by the renowned Carlovitz.

Planet—Mr. C. M. Goodell, New York, claims the name of Planet for his pure Laverack setter dog (color, blue Belton) by Carlovitz out of Petal. He was whelped November, 1879, and bred by Mr. John C. Higgins, of Delaware City, and is in the hands of Mr. T. D. Gladstone, who is now in Virginia giving his attention exclusively to the field dogs belonging to the extensive kennel owned by the Messrs. Goodell.

Peachontas—Mr. Wm. B. Banks, of New York City, claims the name of Peachontas for his fox terrier bitch, whelped August, 1880, out of imported Tip by imported Viper.

Toker, Jr.—Mr. John M. Forbes, of Virginia, claims the name of Toker, Jr. for his black and white ticked pointer puppy, whelped September, 1880, out of Nymph by Beaufort purchased from Mr. George H. Nixon, of Leesburg, Va.

Lucy—Mr. Chas. E. Scott, of Schenectady, N. Y., claims the

name of Lucy for liver and white cocker bitch puppy out of Mr. Bobt. Wacker's Nellie by Rex.

Frank Foster—Mr. J. N. Carpenter, Washington, D. C., claims the name of Frank Foster for setter dog puppy, whelped September, 30, 1870, out of Mr. C. W. Foster's Kirby by Druid.

Belle's Pride—Dr. Allen B. Clayton, of Chatham, Ont., claims the name of Belle's Pride for his blue Belton bitch puppy by Paris (Leicester-Bart) out of Mr. Harrison's Belle (Pride of the Border-Kirby).

Marshall Duroc—Dr. T. B. Legare, of Camden, S. C., claims the name of Marshall Duroc for leucum and white setter dog puppy, whelped October 27 by Scout (Rock-Kirby) out of Mr. V. H. Andrew's Vasthi (Hake-Fanny).

Nixie—Dr. T. B. Legare, of Camden, S. C., claims the name of Nixie for lemon and white pointer bitch puppy, whelped September 10, 1880, by Beaufort (Bow-Beaulah) out of Nymph (Viscount-Sidmore's Dutch).

Marshall Ney—Mr. F. H. Andrews, of Charlotte, N. C., claims the name of Marshall Ney for liver and white ticked pointer dog puppy, whelped September 10, 1880, by Beaufort (Bow-Beaulah) out of Nymph (Viscount-Sidmore's Dutch).

Talulah—Mr. F. H. Andrews, of Charlotte, N. C., claims the name of Talulah for lemon and white pointer bitch puppy, whelped October 20, 1880, by Judge Legare's Rab (Rush-Romp) out of his Beltona (Bow-Beaulah).

BRED.

Moll S.-Blue Drake—Mr. Sherwood's (Shueatles, N. Y.) setter bitch M. S. to Mr. J. H. Whitman's three-quarter Laverack setter dog Blue Drake.

Flora-Carlitz—Mr. J. H. Whitman's (Chicago, Ill.) cocker spaniel bitch Flora to same owner's Carlo.

Lady Blue Dash—Mr. Stafford's setter bitch Lady (Royal Duke-Guido) to Blue Dash.

Aorah-Mike—Mr. E. B. Hall's Norah to the Excelsior Irish Water Spaniel Kennel Club's champion Mike. The club has one-half the progeny.

WHELPS.

Ruby—Mr. Howard Hartley's (Pittsburgh, Pa.) black and white imported English setter bitch Ruby, whelped January 1, 1881, nine pups, six dogs and three bitches, by owner's Rake.

Lady Trustine—Mr. R. G. Sylvester's (Carbondale, Ill.) Irish setter bitch Lady Trustine, whelped January 16, 1881, eight puppies, four dogs and four bitches, to Dr. Jammell's Elcho II.

SALES.

Joe, Jr.-Fannie Whelps—Mr. G. W. Campbell, of Carter's Creek Station, Maryland, has sold a red bitch puppy with white points to Mr. G. W. Jones, of Florence, Ala.; one white dog puppy with lemon marking on head and ears to Mr. P. Bates, of Marion, Ala.; one white dog puppy with lemon about head and ears to Mr. Marion Smith, of Jackson, Miss.; one white dog puppy with lemon about head and ears to Mr. G. A. Wilson, of Lexington, Miss.

Pat—Mr. G. W. Campbell, of Carter's Creek, Tenn., has sold to Mr. Albin Omborg, of Rome, Georgia, red Irish setter dog Pat out of Joe's imported.

Erin III-Hush Whelp—Mr. H. W. Cory, of St. Paul, Minn., has sold to Mr. J. O. Leary, Jr., a red Irish setter pup out of Hush by Erin III.

Mack Laverack—Mr. J. J. Snellenburg, of New Brighton, Pa., has sold his ten-month-old pure Laverack setter Mack Laverack (Thunder-Peaces) to Mr. D. McKay Lloyd, of Pittsburgh, Pa. Mack Laverack won first prize in native setter and puppy class at Pittsburgh, 1881, and will be sent to H. M. Short to be broken for the N. A. K. O. Derby.

Carlitz—Messrs. Von Culm have sold to Mr. James H. Goodsell, New York City, the celebrated pure Laverack setter dog Carlitz favorably known as a prize-winner in England before he was imported, and the sire of very many prize-winners and crack field dogs in America.

Dave—Mr. C. Du Tour, of Cincinnati, Ohio, has sold to Mr. Harry Hill, of same city, the Irish setter dog Dave out of imported Dansee by champion York.

Jubert—The Essex County Hunt, Montclair, N. J., have sold the young English hound Jubert to Mr. T. E. Kendrick, Lebanon, New York. Jubert, although hardly two years old, hunted down this season no less than 186 rabbits.

Marshall Duroc—Mr. H. Andrews, of Charlotte, N. C., has sold the lemon and white setter dog puppy Marshall Duroc by Scout out of his Vasthi (Hake-Fanny), litter sister to Sanborn's Dan to Dr. S. B. Legare, of Camden, S. C.

Belle—Mr. Robert M. Baker, of Detroit, Mich., has sold to Mr. J. R. Stanyon, of Pittsburgh, Pa., black, white and tan beagle bitch puppy, four months old, out of Pan by Battler. Belle won first in beagle puppy class at Pittsburgh, 1881.

Croxteth-Bliss Whelps—Mr. Geo. N. Beckwith, of Latrobe, Pa., has purchased from Mr. N. Boyd, Richmond, Va., a brace dog and bitch out of Bliss (Ben-Denard) by Croxteth. This brace is an unusually fine one.

PRESENTATION.

Charm-Blue Duck Whelp—Mr. J. H. Whitman, of Chicago, Ill., has presented a liver and white ticked setter bitch puppy out of Blue Dash by Charm to Mr. J. C. James, chief engineer of Chicago and Grand Trunk Railway, Battle Creek, Mich.

Joe, Jr.-Fannie Whelps—Mr. G. W. Campbell, of Carter's Creek, Tenn., has presented a white bitch with lemon about head and ears to Mr. M. M. Williams, of Columbia, Tenn.; one white bitch with lemon about head and ears to Mr. M. C. Campbell, Springfield, Tenn.

Tom-Lola Whelp—Dr. George A. Foote, of Warrenton, N. C., has presented Mr. Charles Richards, of Brooklyn, N. Y., a handsome white and liver pointer puppy out of his Lola (Reubene) by Tom.

Ree-Settle Whelp—Mr. Robert Walker, of Franklin, N. Y., has presented Mr. Charles E. Scott, of Schenectady, N. Y., with a finely marked liver and white cocker bitch puppy out of Nellie by Rex.

DEATHS.

Corra—The Lachine Kennel Club's liver colored spaniel bitch Corra on January 19. Corra was whelped April 29, 1879, out of Old Brown by Bollo. She was a well-known winner on the bench, and a careful worker in the field.

The Rifle.

RANGE AND GALLERY.

Boston, Mass., Jan. 11.—The annual meeting of the Massachusetts Rifle Association was held at 608 Washington street this evening. The reports of the various officers showed the association to be in a fine condition financially. The following officers were elected for the ensuing year: Vice-Presidents, Salem Wilder and A. H. Hardy; Secretary, H. T. Rockwell; Treasurer, J. N. Frye; Directors—J. F. Brown, W. Gerrish, E. B. Souther, H. T. Rockwell, A. C. Gould, H. O. Harris, C. W. Hinman, F. J. Rabbeth, Z. T. Hubbard, J. N. Frye, Salem Wilder, R. D. Archer, E. F. Richardson, L. B. Fellows and T. H. Gray. These officers will choose the President. At the close of the meeting the members were entertained by W. W. Newton at the Mammoth Gallery, No. 655 Washington street.

At the Magnolia Gallery the stormy weather added many to the list of shooters and some fine work was accomplished. Mr. B. Edwards was the champion of the week and only failed of the gold prize for ten straight bullseyes by a single point. Mr. Dunn's 129 with the pistol is the best on record in the city. Ellsworth for

127 shows capital holding and nerve. The summary gives the result of the week in all matches:

Match No. 1.									
B Edwards	47	49	48	48	49	48	49	48	49
C Wright	47	47	48	48	47	48	47	48	47
W H Farnham	47	47	48	48	47	48	47	48	47
G F Ellsworth	46	48	47	47	48	47	48	47	48
C Gilman	45	46	46	46	45	46	46	46	45
S Grogan	45	45	46	46	45	46	46	46	45
G Williams	45	45	45	45	46	45	45	45	46
P Jones	44	44	45	45	44	45	44	45	44
E Williams	43	43	44	44	43	44	43	44	43
B Taylor	43	43	44	44	43	44	43	44	43

Match No. 2.									
C Wright	45	45	46	46	45	46	45	46	45
G Williams	45	45	46	46	45	46	45	46	45
W Hunter	44	46	45	45	44	45	44	45	44

The Forest and Stream Match.									
B Edwards	4	5	5	5	5	5	5	5	5
C Wright	4	5	5	5	5	5	5	5	5
C Gilman	4	5	5	5	5	5	5	5	5
J Edwards	4	5	5	5	5	5	5	5	5
W H Farnham	4	5	5	5	5	5	5	5	5
C Gilman	4	5	5	5	5	5	5	5	5

The Pistol Match.									
C Dunn	43	43	43	43	43	43	43	43	43
G F Ellsworth	42	44	44	44	44	44	44	44	44
C Wright	41	41	41	41	41	41	41	41	41
W H Farnham	41	41	41	41	41	41	41	41	41
T Tryon	41	41	41	41	41	41	41	41	41
C Wright	41	41	41	41	41	41	41	41	41
O A Cross	41	41	41	41	41	41	41	41	41

MAMMOTH RIFLE GALLERY.—Boston, Jan. 21.—The third week in the New Year rifle match at the Mammoth Gallery has been a busy one and the shooting has been of high standing. Mr. J. H. Williams was successful in getting a clean score of eight consecutive bullseyes and received the extra prize of \$15 for this splendid holding. He has also added a fine 39 and 38, which places him well to the front. Mr. J. Merrill is still in the lead, with 194 out of a possible 200. Mr. J. H. Williams is second with 191, outranking Mr. E. F. Richardson, who also has 191. Mr. N. W. Arnold is fourth with 190; Mr. J. Ames is fifth, with 184, outranking Mr. Elihu Wilden, who is sixth, with 184. Next month will commence a new set of rifle matches. The first on the list will be the Every-body's Rifle Match, open to all comers, with six cash prizes, as follows: \$7, \$6, \$5, \$4, \$3, \$2, \$1. Also an extra prize of \$10 to any one making a clean score of eight consecutive bullseyes. Conditions are: Any 22 calibre rifle; rounds, 8; possible 40; five scores to win, or possible 200; position, off-hand; distance, fifty yards; the rifle to be three pounds pull. Match No. 2 will be called the Silverware Rifle Match. This match is gotten up as an incentive to stimulate practice and is open to all who have never won a prize in the gallery. The first prize will consist of an elegant silver pitcher and salver, the second prize will be \$12 in cash and the third prize \$8 in cash; also, an extra prize of \$15 to any one making a clean score of eight consecutive bullseyes. Conditions are: Any 22 calibre rifle; three pounds pull; position, off-hand; rounds, 8; possible 40; five scores to win, or possible 200; distance, fifty yards. In addition to the above matches, the Forest and Stream Rifle Match, for the elegant meerschaum pipe, which continues until May 1, making in all three rifle matches. Following are the leading competitors, with their scores to date, in the New Year Rifle Match—fifty yards; rounds, 8; possible 40; five scores to win, or possible 200: J. Merrill... 38 39 39 39 40—194 L T Folsom... 35 35 36 36 36—178 F J Richards... 35 35 35 35 36—177 J J T... 35 35 35 35 36—177 A G Goodspeed... 35 35 35 35 36—176 N W Arnold... 35 35 35 35 36—176 F J Snow... 35 35 35 35 36—176 J Ames... 35 35 35 35 36—176 E H Wilden... 35 35 35 35 36—176 G Warran... 34 34 35 35 35—173 C R Bartlett... 34 35 35 35 36—172 O T Hart... 34 35 35 35 36—174 A C Gould... 34 35 35 35 36—174 B H Daley... 34 35 35 35 36—174 H K Knowles... 34 34 35 35 35—173 S Fogg... 35 35 35 35 36—178

Forest and Stream Rifle Match.—The Forest and Stream Rifle Match, began January 1, to continue until April 30, inclusive, the prize being an elegant meerschaum pipe, has had few entries, it being early in the match, although an increasing interest is shown from week to week. Mr. D. N. Sherburne leads this week with a good 38, but the conditions are the best aggregate of five scores made during the match. Following are the leading scores to date—fifty yards; rounds, 8; possible 40: D N Sherburne... 4 5 5 5 5 5 5 5 5 5—38 Geo D Elson... 4 4 5 5 5 5 4 4 5—38 S Fogg... 4 4 5 5 5 5 5 5 5 5—36 F J Richards... 4 4 5 5 5 5 5 5 5 5—36 G A Goodspeed... 4 4 5 5 5 5 5 5 5 5—36 C R Bartlett... 4 4 5 5 5 5 5 5 5 5—36 B J Halcy... 5 5 5 5 5 5 5 5 5 5—36

Pistol Practice.—Practice with this arm this last week has been lively and some of the finest shooting ever done in the gallery has been recorded. Mr. Elihu Wilden has increased his score two points over last week, when he had surpassed all previous efforts, and he now leads with two fine record of 115 out of a possible 120. Mr. S. Souther follows very close in Mr. Wilder's steps with 114 and Mr. J. J. Dunne and Mr. F. J. Rabbeth are tie for the third place with 112. In shooting of the tie for the third prize in last month's match Mr. Wilder defeated Mr. Ames. Following are the leading scores to date—fifty feet; rounds, 8; possible 40; three scores to win, or possible 120: Elihu Wilden... 38 38 39—115 Wm Poland... 32 31 35—109 S Souther... 35 35 39—114 J F Scott... 33 34 34—101 J J Dunne... 35 37 38—112 F J Snow... 33 33 38—99 F J Rabbeth... 37 38—112 O T Hart... 32 32 35—98 J Ames... 36 36 37—109 C F Foster... 32 32 33—97 J N Williams... 34 34 36—103 T Folsom... 32 32 33—97

N. R. A. PRESIDENCY.—The Executive Committee of the Board of Directors of the National Rifle Association on the afternoon of January 20, at No. 35 Park row to elect a president, by E. A. Buck, who was chosen to the position, being obliged by business engagement to decline. There were present General George W. Wingate, Colonel J. H. Cowperthwaite, Captain W. Murphy, Mr. F. H. Holton, Mr. David W. Judd, Mr. Frank J. Donaldson. Mr. Donaldson nominated General Hancock and was seconded by Captain Murphy and Mr. Judd. The latter referred to the condition of the association and said he hoped that those who are now understood from hearsay to be unfriendly to rifle practice would be less so when they had held their offices a longer time. General Hancock was then elected unanimously. General Wingate said that General Hancock had already rendered many services to the association; it was through his personal solicitation that the Hilton Shield for the international matches was given, and it was on his application that the Federal Government sent teams from the army to compete at Creedmore. He has also given advice to the directors on many occasions. The board before nominating him had received a letter from him in which he promised to accept the office. After the election the board adjourned.

CONLEY'S GALLERY.—The second week's contest of the pistol shooting tournament for the championship of bullet shooting, end-

ing January 22, 1881, the distance shot at being 4, 10 and 15 yards; 30 shots; 10 shots at each range. The prize was captured by W. Daniel A. Davis, making one of the finest scores on record—viz., suspended ball, 7 yds., 7½ in. bullets in 10 shots; 10 yds. 5½ in. bullets in 10 shots; 15 yds. 3½ in. bullets; total 15. Mr. Davis has proved himself to be one of the most expert pistol shots as well as a rifle shot, having made some of the finest scores with the rifle of any amateur of this city. Mr. Davis' shooting is remarkable when you take in consideration the smallness of the bullet. The shooting is all done with a .22 cal. pistol, 10 of the marks shot at being really the same size as the bullet used to shoot at them. The next week's shooting will be at the word of command, 10 shots at 10 yds. of ready measurement target, as this is one of the oldest styles of shooting, and will decide who has the right to claim the championship for rapidity and accuracy. The shots must be fired in the space of 5 seconds. The time will be announced by the metronome, the same as is now in all the great pistol tournaments of Paris. This will be undoubtedly one of the most closely contested weeks of the tournament. There were some most skillful feats by several crack shots during the week. That of Mr. W. M. Chase's of hitting 9 bullets in 10 shots at 7 yds. the bullets only being 2.8 of an inch in diameter, has never been equaled before in this gallery. L. Meadburn, of Salt Lake, hit 7 swinging bullets in 10 shots, which is very fine shooting, and places him on record as a skillful marksman.

ZETTLER'S RIFLE GALLERY, New York, Jan. 15.—Monthly shoot, open to all comers. Mr. P. Fenning leads the score with 188 out of a possible 200, which is fine holding. Conditions—Rifle, .22 cal.; 10 shots; four best aggregate scores to take first prize and so on; for a full single score, \$10 premium; for six consecutive bulls, \$1; five prizes. Shooting closes January 31, 1881:

P. Fenning.....	188	H. Bolger.....	171
M. B. Elmer.....	182	S. D. Ward.....	171
W. L. Algeo.....	175	W. H. Calvert.....	159
J. L. Crozier.....	174	J. G. Mumford.....	157
J. H. Brown.....	174	P. Fabrus.....	156
N. Porter.....	167	R. Zimmerman.....	156
J. Levy.....	167	W. Wiegand.....	154

WHEELING, W. Va., Jan. 17.—Last Saturday the Wheeling Rifle Club finished the shooting for a handsome engraved glass water set, which was won by Mr. R. S. Stewart winning it three out of five matches. Mr. Wm. Cox and Otto Jaeger each won one. Following is the score:

R. S. Stewart.....	12	7	11	9	11	12	12	12	108
Otto Jaeger.....	10	10	11	10	10	10	11	10	95
Wm. Cox.....	10	9	10	11	8	11	9	10	95
J. R. Jaeger.....	10	10	9	11	7	8	8	9	88

SAN FRANCISCO, CAL., Jan. 1.—Col. Kellogg and Sergeant Williams settled an old difference between themselves by 100 shots over the 200-yard range. The shooting took place at the Shell Mound Park, each man loading his own ammunition. The rifles used were respectively the Hotchkiss and Borchard. The scores standing:

Colonel Kellogg.....	4 4 4 5 5 4 4 5 4 4 4 4 4 4 5 5 4 4 5 4 4
Sergeant Williams.....	5 5 5 4 5 4 4 4 4 5 4 5 4 5 4 5 4 4 4 4 4
Sergeant Williams.....	5 4 4 5 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Sergeant Williams.....	5 4 4 5 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Sergeant Williams.....	5 4 4 5 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Sergeant Williams.....	5 4 4 5 4 5 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

LIEUT. SCHWATKA'S RIFLES—Governor's Island, N. Y., Jan. 3.—Messrs. E. Remington & Sons, New York City, N. Y.—Dear Sirs: In justice to yourselves as generous contributors to my late expedition in search of the relics of Sir John Franklin from 1875 to 1880, I would state that the two rifles furnished by you exceeded my expectations. They were frequently used during temperature ranging from 50 to 65 degrees and at distances from 200 to 600 yards with perfect working of their parts and with deadly effect. I consider that on my expedition the arms used were subjected to the severest practical test to which guns have ever been exposed. Compelled to be kept out of doors constantly to avoid the moisture of the igloos, lashed in convenient places for immediate use on constantly overturning sledges, used at a moment's notice under all variations of temperature and weather, the "Remington" never failed us on this expedition, where the lives of nineteen human and an average of thirty draft animals depended for over ten months upon the efficacy of our firearms. Yours very respectfully,

FRED'K SCHWATKA.

Lieut. F. S. Army, late commanding Franklin search party, 1878-79-80.

Suffer on, Groan on, Sicken on, Die on, if you will not use Hop Bitters and be cured.

Answers to Correspondents.

NO Notice taken of Anonymous Communications.

C. O. B., Easton, Md.—See Game columns for address of dealer in live quail.

J. M. H.—The law was compiled by the President of the State Association, and was, we believe, correct.

C. G. M., New Haven, Conn.—At Melrose, Fla., you will find quail, turkey and deer eight miles from Waldo.

A. D. W.—We would recommend you to read Bogardus' book, "Field Cover and Trap Shooting." We can send it to you; price \$2.00.

REPEATER, Buffalo, N. Y.—The style of rifle you describe would be an improvement on existing models, provided it had no serious defects.

W. J. D., New Orleans, La.—We cannot give you the name of the best farmer's paper in America. There are between two and three hundred published.

THRODOR.—My glass ball shooting last year gives an average of 92½ per cent. Is that a good record? Different traps, some screened, some rotary; all good swift balls in 18 yards rise; 10-gauge gun; ¼ dr. powder, 1½ oz. No. 9 chilled shot. Ans. The record is one in which you ought to be satisfied.

A. W. M.—The Hudson's Bay Company still use the flint lock guns in trade with the Indians at their most remote posts, because of the difficulty of procuring suitable ammunition for percussion-

cap arms. At the nearer posts the Indians are armed with a better class of weapons, many of them using breech-loading rifles and repeaters.

G. O. G.—You will find the Racine Shadow, Rushton's sailing canoe (new model) and Stevens' sailing canoes of American styles all of excellent qualities, as they are the outcome of experience combined with familiarity with the whole subject of canoeing. If you want a semi-portable canoe verging into a yacht Stevens can build you a centre board on Baden Powell's lines.

C. E. T., New York.—You should liberate four quail at a time, two males and two females. Do not put the whole twelve down in the same place, but scatter them over a considerable area. If all are put down in the same field they may not separate next spring to breed. The birds should not be turned out much before May, and should be fed for a few days after their liberation.

R. T. M.—The local papers speak of taking striped bass under the ice, near Poughkeepsie, with bait. It should be noticed in FOREST AND STREAM, as it is a rare occurrence. Ans. We have mentioned the capture of unusual numbers of this fish in the Hudson, but they are taken in nets pushed under the ice. We doubt their taking bait in winter, as those which come to market have empty stomachs.

H. L. G., Brookfield, N. Y.—1. Where can I sell a petrified turtle? It is about eight inches across, ten inches long and is in a good state of preservation; shows all the ridges and creases of the shell as natural as life. 2. What would it bring as a natural history specimen? 3. Would you sell the same for me if I send it to you? Ans. 1. Some dealer in natural history specimens might buy it. 2. Two or three dollars. 3. No.

A. W. G.—What is the size of a stream or pond necessary for the successful introduction of carp, and what is the manner in which to proceed to get them? Ans. Carp will thrive in mill ponds, but are not adapted to small streams. Any warm pond with muddy bottom will do, provided it does not freeze solid to the bottom in winter. Apply to S. P. Baird, U. S. Fish Commissioner, Washington, D. C., and mention FOREST AND STREAM and you will get some of next summer's crop in August or September; last year's fish have been distributed.

J. E. D., Worcester, Mass.—How is the fishing in Florida in February, March and April? What I want to know particularly about is rod and fly fishing. Ans. The fishing is good at most all seasons, as there are plenty of local fishes which do not migrate. Black bass (trout in the vulgar) grow to a large size. Take a stout trolling rod of ten feet, with reel holding 150 feet of braided line, heavy gut leader and bright flies. If you fish for other fish in salt water do not use silk line. It is hard to say just what you want from your brief questions.

C. E. C., Phila.—If you were asked, as I was the other evening by half a dozen friends in chorus, which is considered the most intelligent breed of dogs, what would be your answer? Ans. It is claimed by many writers of experience that the collie, or sheep dog, is naturally the most intelligent. Close interbreeding for five generations will, however, produce an idiot. The collie, as a general thing, is self-taught to a great extent, and he has been singled out and stories of his wonderful performance narrated, more often in books of natural history than of any other breed.

W. W., Spencerport, N. Y.—Is not the correct name of the bird usually called quail, Virginia partridge? and is not the proper name of what is usually called partridge, ruffed grouse? Ans. It is difficult to give a categorical reply to this question. The bird usually called quail in the North is called partridge in the Southern States. Audubon speaks of it as the Virginia partridge; Wilson, as the Quail, or Partridge; other authors as Virginia Quail; Maryland Quail and American Partridge. Structurally it is more closely allied to the true partridge than to the true quail. The correct name of what is called partridge in New York and New England, and pleasant in Pennsylvania, the South and some sections of the West, is ruffed grouse.

T. W. MeA.—Will you please describe in your next issue the target used in Mammoth Gallery? size of target, size of bullseye and distance between circles? Ans. The distance of the gallery is 50 yards and there is in use an iron Creedmoor target reduced from 300 yards. "The bullseye" is a two-inch hole in the iron plate, and two inches back of this target is a steel plate painted black sitting on a lever supported by weights. When this steel plate is struck by a bullet it knocks down this lever and the weights pull the wire which is connected to a large bell which rings at the firing point. The pistol target is a large iron target with a two-inch bullseye, and the arrangements about it are the same as our rifle target, with the exception that the pistol target bullseye is run with electricity. An electric bell rings at the firing point when a bullseye is made uppers which count on a paper target. As bullseyes only count four a shot must go through the hole clean or it will not ring the bell, so that the shooter really has to put his right shot inside a one inch and a half ring—for the rifle, 50 yards, and the pistol 50 feet, which requires better holding than it would on a paper target. They use a Frank Wesson 12 inch barrel and a Stevens 10 inch barrel, open sights, 22 calibre, one pound pull.

GEO. T. C., Buffalo, N. Y.—Our correspondent, "Au Sable," supplies the information as follows:

"Hudson's Bay Company's overcoats are made of young buffalo skins or deer skin tanned with the hair on. Also of buffalo skin with the hair off, which closely resembles thick buckskin. These last, however, require to be used with good woolen underclothes, as, although they keep out all wind, they do not possess any great amount of warmth in themselves. The first-named kind cost from \$8 to \$15, and the last from \$4 to \$12, according to quality and finish. They can only be procured, as far as I know, from the Hudson's Bay Company's stores in Montreal or in Winnipeg. I have a suit I brought from there last summer, which cost me about \$8 in trade, plain, well made and strong. They would not be suitable for a hunting trip in Canada, as they are too hot and heavy when walking or hunting. The best coat your correspondent can use in this country for a winter hunting coat is a blanket coat that can be bought at Henderson's fur store in Montreal, G. R. Renfrew's in Quebec, or J. S. Patterson, furrier, Baudre street, Quebec; price \$7 to \$15 without duty or express charges. They can be got blue or white, according to taste, and are light, strong and warm, and stand any amount of hard usage; things indispensable in clothes to be used in the woods."

—Any subscriber or reader of FOREST AND STREAM in want of any kind of carpetings, oil cloths, rugs, etc., etc., can be sure of fair treatment at the hands of John H. Pray, Sons & Co., Boston. Call or correspond with them, and get their prices before buying. It will pay you to try them.—[Adve.]

For General Debility and Prostration Hop Bitters will do wonders. Prove it by trial.

PUBLISHER'S DEPARTMENT.

HOLLAND Shooting Suits, Uplandgrove & McEllan, Valparaiso, Ind. More health, sunshine and joy in Hop Bitters than in all other remedies.

NEW PUBLICATIONS.

THE NUTTALL BULLETIN.—One of the most pleasantly written articles that we have read for a long time is Mr. E. W. Nelson's sketch in the January *Bulletin* on Door-yard Birds of the Far North. Treating as it does of far-away Alaska, and mentioning so many species that most collectors are entirely unfamiliar with, it is a very interesting contribution. Mr. Jeffrey, also, in the Fingers of Birds is also a valuable paper, and we are glad to see that some ornithologists are at last getting beyond the skin of the bird. Certainly there is more to be made from the anatomy of this class than has yet been done, and the anatomical characters are unquestionably of far higher value than the external ones. Mr. De L. Barber contributes to the present number of the *Bulletin* some Notes on a Few Birds observed at Fort Hamilton, Long Island, and Mr. W. E. D. Scott a paper on the Birds Observed in Sumter, Levy and Hillsboro Counties, Alaska's paper on Arctic Birds, and Mr. De L. Barber in their Relation to Man is a carefully written and thoughtful review of Professor Forbes' paper on the "Food of Birds." The birds on a Florida River contain a number of notes by Mr. Wm. Brewster, written in his usual charming style, on some of our Southern birds, and is very interesting.

The most important paper in the *Bulletin* is Dr. Schaler's Remarks on the Present State of the Systema Avium, reprinted from the *Ibis* of July 1880. Only a portion of it appears in this number, and ornithologists will be glad to see the *Ibis* will anxiously await the appearance of the remainder.

The department of Recent Literature contains notices of the Third and Fourth Installments of Dr. Cones' Ornithological Bibliography of Hærvic-Brown's paper on the Ornithological Index in Scotland, of Mr. Steere's List of the Birds of Ann Arbor, Mich., and of Minor Ornithological Papers.

General Notes are very full and interesting.

"FRIENDS WORTH KNOWING" is the title of a little book published by the Harpers. It consists of a series of articles on a number of familiar animals compiled by Mr. Ernest Ingersoll to the number of several of our magazines. The articles are representative of the ordinary magazine natural history literature and, although they contain nothing new, are written in rather a pleasing style, which will no doubt commend them to many readers. The different papers, however, contain many of them, inaccuracies which should not appear. To say that "the bird's arm ends in only one slender finger" is certainly a loose statement and sure to mislead. The book does not, of course, purport to be in any way scientific, but the faults and errors are such that it is not a work which should be through it might, it would seem, by a little more care in collecting materials, have been avoided.

Mr. Ingersoll's little work, however, with its sky blue binding, golden lettering and golden birds of their scarlet breasts will, no doubt be a certain source of pleasure to many of our readers who do not care so much for scientific facts and knowledge as for something which will pass away an hour pleasantly and at the same time allow them to labor under the pleasing delusion that they are learning something. The essays I want to quote are, "The bird's arm ends in only one slender finger" and "The bird's arm ends in only one slender finger." The book does not, of course, purport to be in any way scientific, but the faults and errors are such that it is not a work which should be through it might, it would seem, by a little more care in collecting materials, have been avoided.

A LIBERAL OFFER.—Having arranged club terms with the *North American Review* we are enabled to offer that foremost of American periodicals, together with the *Forster* and *Stratford*, at the low price of \$7.75 per year. The *Review* is the organ of the best minds of America, nearly every writer of any note in the country being a contributor to it. It discusses the subjects that are most prominent in the public mind, and takes a certain view of the most important questions. It combines in a considerable extent the thoroughness of the *Cyclopædia* with the timeliness of the daily paper. It should be read by the professional man, the student, the merchant, the manufacturer, the farmer; in fact, by every one who is interested in the progress of the events of the day. The regular subscription price of the *Review* is \$5.

A good excuse for sickness of yourself and family is that you don't use Hop Bitters.

Yachting and Canoeing.

YACHTING NEWS.

THE CUTTER FLEET.—The number of cutters is rapidly increasing faster than the most enthusiastic lover of the craft could have hoped for. Besides the three designs furnished by Mr. A. Cary Smith for cutters—30, 40, and 50ft.—other parties have in hand the lines of three more—two line thirty-tonners, each 50ft. water-line and a grand 100 tonner of 80ft. About a dozen cutters of all sizes will be launched this season for American waters, with deep sloops and modified cutter rigs are in a fair way of running out the old-fashioned light draft man-traps with their lubber's rig. In Boston, the re-action in favor of depth and lead already hereabouts is beyond reason. Yachts under 30ft. of water-line seem few and over, while a late design of 33ft. w. l. has seven feet of depth, and the smart little Gem and others are to come out with practically all their ballast in lead on the keel! Verily, a most complete abandonment of "re-ancient" ideas of "skimming over the water," and a change for the better none appreciate more than ourselves and the few who, with us, have championed the cause of the honest boat and legitimate yachting against the hallucinations of vast odds of "machine athletes." These words may be given more force when we add that one of the new "line" boats is being got out for a gentleman who owned one of the fastest and most successful light drafts in America. Cutters are booming!

QUAKER CITY YACHT CLUB.—The following officers have been elected for 1881: Commodore, R. P. Thompson (Vice Com., R. A. Anderson); Regatta Committee, J. W. Thompson, J. B. Smith, Secretary, Chas. S. Sabin; Asst. Sec., W. E. Wise; Treasurer, Capt. J. C. Vandervelde; Regatta Committee—A. F. Baurfoot, W. J. Thorman and L. Coleman. Annual Spring Regatta has been fixed for Monday, June 6.

YACHTING CIRCULAR.—Mr. Geo. Wilson, 157 Leadenhall st., London, has sent in a circular for January, 1881, containing an interesting article on the "Cracks of 1880," and a long list of all tonnage on the market in England, which gives a very fair insight into the current value of yacht tonnage across the water.

PRICE, \$2 00.
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EVERY ROD WARRANTED.
Satisfaction guaranteed. Send stamp for
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PERFECT SHIRTS,
FINE UNDERCLOTHING,
BLUE SUITS, Etc.,



Price \$20 each. Will give away small pointer bitch
Clare, 3½ years old (Button-Tops) to any one that
will give a pair of pups from first litter by good,
small pointer dog. Address ROBT. WALKER,
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Rifles, \$22; Sporting and Hunti

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Miscellaneous

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Wind and waterproof, flexible as kid—tanned lined—tan color, wine color or black. Bread measure and length of sleeve only required. Price \$12.50, sent by mail without extra expense. These are the only Leather Jackets appropriate for sportsmen. They are a sure protection against inclement weather. Address

G. W. SIMMONS & SON,
Oak Hall, Boston, Mass.,
Manufacturers of the celebrated "Boston Shooting Suit" and Importers of Leather Jackets.

FLORIDA.

Revised Descriptive Circular

— OF —

DeLAND, FLORIDA.

JANUARY 8, 1881.
The village of DeLand is located five miles east of our landing, on the St. Johns River, where all river steamboats pass, very near the geographical center, north and south, of Volusia County, and almost exactly in the center of the

GREAT ORANGE BELT.
This place is about twenty miles from the Atlantic Ocean, and is almost constantly favored with a tempered

SEA BREEZE,
and from its elevation above the river, its location among the pines, and its isolation from all standing water, it is peculiarly adapted to the necessities of invalids.

This belt of land is about twenty miles long, and averages about five miles wide, is gently undulating, and, in our immediate vicinity, somewhat hilly. Our lands are

ENSURPASSED IN FERTILITY
by any pine region in the State. In our village, which is only four years old, we have a

FINE SCHOOL BUILDING,
used also for union Sunday School and church services.

We have daily mails, three general merchandise stores, one of the largest in South Florida, a drug store, millinery and notion store.

"THE FLORIDA AGRICULTURIST,"
a large eight-page weekly paper. A railroad from our landing, via DeLand to the Atlantic coast, is chartered and work commenced; also material on hand for a telephone to our landing. Our boarding houses afford good fare at reasonable prices.

For the information of invalids we will add that several good physicians are settled in our midst, cultivating oranges as a business, but affording excellent medical aid when required. They report the following:

REMARKABLE HEALTH RECORD:
"During the years of 1878, 1879 and 1880, within a circuit of six miles diameter, DeLand being the centre, with a population averaging over 250, thirty or more have been invalids, there have been but four deaths. Two were infants under six months, and two were men who came here sick."

A CHAIN OF LAKES
northwest of us affords protection from frost so perfect that the extreme cold of Dec. 29, 1880, did not injure our orange trees; and we are offering these choice lands to actual settlers at from ten to thirty dollars per acre. Village lots and improved property for sale also. For further particulars call on or address

J. Y. PARCE,
DeLand, Volusia County, Fla.
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Largest and most complete book, Price \$3.50.

This book is especially written for the Blacksmith, Farrier, Horse-shoe man, and Farmer. The directions for treatment are plain, concise and reliable. Sent free by mail on receipt of price. Address: H. C. LEITCH, 125 Broadway, New York, or at New York, Philadelphia, Baltimore, Chicago, New Orleans, San Francisco. Dupied in England in 1875.

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TAKE THE

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Trout, Grayling, and Black Bass Fisheries,

FAMOUS SUMMER RESORTS AND LAKES

OF

NORTHERN MICHIGAN.

The waters of the
Grand Traverse Region
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BROOK TROUT abound in the streams, and the famous AMERICAN GRAYLING is found only in these waters.
The BROOK season begins May 1 and ends Sept. 1. The GRAYLING season opens June 1 and ends Nov. 1.
BLACK BASS, PIKE, PICKEREL, and MUSC- LONGE, also abound in large numbers in the many lakes and lakelets of this territory.
The sportsman can readily send trophies of his skill to his friends or "club" at home. Care for packing fish can be had at many points.
TAKE YOUR FISH WITH YOU. The scenery of the North Woods and Lakes is very beautiful; the air is pure, dry and bracing. The climate is peculiarly beneficial to those suffering with

Hay Fever and Asthma Affections.
The hotel accommodations are good, far surpassing those of any other countries now enough to afford the finest of fishing.
During the season Round Trip Excursion Tickets will be sold at low rates, and attractive train facilities offered to Tourists and Sportsmen.
Dogs, Guns and Fishing Tackle Carried Freight Free.
It is our aim to make sportsmen feel "at home" via this route. For a Tourist's Guide (an attractive illustrated book of 80 pages), containing information and accurate maps of the Fishing Grounds and Time Cards, address A. B. LEITCH, Gen'l. Pass. Agent, Grand Rapids, Mich.

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Comprising those of Central and Piedmont Virginia Blue Ridge Mountains, Valley of Virginia, Alleghany Mountains, Greenbrier and New Rivers, and Kanawha Valley, and including in their varieties of game and fish, deer, bear, wild turkeys, wild duck, grouse, quail, quail, woodcock, mountain trout, bass, pike, pickerel, etc. Guns, fishing tackle, and one dog for each sportsman carried free.

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Richmond, Va.

LONG ISLAND R.R.—SPRING-SCHED- ULE, taking effect March 14th, 1880.—Leave HUNTER'S PT (Flatbush Ave., Bklyn) 5 min. earlier for
Babylon, 8:35 A.M., 3:35, 4:35, 5:35 P.M. Sundays, 9 A.M.
Ct. Pt. & Whitestone, 7:35, 8:45, 10, 11:25 A.M., 2:35, 3:35, 4:35, 5, 5:35, 6, 6:35, 7, 7:35, 9:15, 10:45 P.M., 12 1/2 night.
Sundays, 9:35, 10:25 A.M., 1:35, 5:35, 7, 10 P.M.
Flushing, 6:25, 7:35, 8:45, 10, 11:25 A.M., 2:35, 3:35, 4:35, 5, 5:35, 6, 6:35, 7, 7:35, 9:15, 10:45 P.M., 12 1/2 night.
Sundays, 9:35, 10:25 A.M., 1:35, 3, 5:35, 7, 10 P.M.
Far Rockaway, 8:35, 11 A.M., 4:35, 5:35, 7 P.M.
Rockaway Beach, 11 A.M., 4:35 P.M. Sundays, 9 A.M. and 6:35 P.M.
Great Neck, 8:30, 7:35, 11:25 A.M., 4:35, 5:35, 6:35 P.M.
Sundays, 9:35, 10:25 A.M., 1:35, 3, 5:35, 7, 10 P.M.
Garden City, Queens and Hempstead, 8, 10 A.M., 1:35, 3:35, 4:35, 5:35, 6:35 P.M. From Flatbush av. daily, except Sundays, and From Hunter's Pt. Monday, Wed., Fri. and Saturday, 12:15 night, Wednesdays and Sundays only from Flatbush av. 10 P.M. Sunday, 9 A.M., 1:35, 6:35 P.M.
Glen Cove, Locust Valley, Glen Head and Roslyn, 8, 10 A.M., 3:35, 4:35, 5:35, 6:35 P.M. Sundays, 9 A.M. and 6:35 P.M.
Greenport and Sag Harbor, 8 A.M., 3:35 P.M.
Huntington and Northport, 8, 10 A.M., 1:35, 6:35 P.M. Sundays, 9 A.M., 6:35 P.M.
Lakeland and Farmingdale, 8 A.M., 3:35, 5:35 P.M.
Port Jefferson, 10 A.M., 4:35 P.M. Sundays, 9 A.M.
Patchogue, 5:35 A.M., 4:35, 5:35 P.M. Sundays, 9 A.M.
Richmond Hill, Glendale, 8:35, 11 A.M., 3:35, 4:35, 5:35, 7 P.M. Monday, Wednesday, Friday and Saturday nights, 12:15. Sundays, 9 A.M., 6:35 P.M.
Creechmoor, 8, 10 A.M., 1:35 P.M., Tuesdays, Wednesdays and Saturdays, commencing Saturday.
HUNTER'S PT & W. L. ST. ANNEX.—Leave Pier 11, E. R. (foot Pines) for Hunter's Pt. 7:35, 10:30, 11:20 A.M., 3:30, 4:10, 5:10, 6:10 P.M. For further information, tickets, commutation, etc., apply at 229 B'way, cor. Barclay.
— W. M. LAFAN Gen'l Pass. Agent.

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SPRINGVILLE HOUSE OR SPORTSMEN'S RES- TREAT, SHINNECOCK BAY, L. I.

By A PRACTICAL GUNNER AND AN OLD bayman. Has always on hand the best of boats, batteries, etc., with the largest rig of trained wild-geese decoys on the coast. The best ground in the vicinity of New York for bay mile shooting of all varieties. Special attention given by himself to his guests, and satisfaction guaranteed. Address Wm. N. LANE, Good Ground, L. I. Before by permission to J. B. Shepherd, 80 Broadway and Wm. Dutcher, 320 Broadway, N. Y.

Old Dominion Line.

THE STEAMERS of this Line reach some of the finest waterfowl and upland shooting sections in the country. Connecting direct for Chincoteague, Goli's Island, and points on the Peninsula, City Point, James River, Currituck, Florida and the mountainous country of Virginia, Tennessee, and Norfolk steamers sail Tuesday, Thursday, and Saturday. Leave, Del., Monday and Thursday at 3 P. M. Full information given at office, 191 Greenwich Street, New York.

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FOR DUCK AND PIGEON SHOOTING.

WIND PROOF.

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Guns, Etc.

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IF YOU DON'T BUY
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IF YOU DO BUY
You will certainly save from fifteen to twenty per cent., so don't fail to call before purchasing elsewhere.

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Muzzle-Loaders Altered to Breech-Loaders.

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